Appendix D

Presentations and Invited Talks

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-DO	Bishop	Nanoscale Heterogeneity and Quantum Phenomena in Complex Matter	International Conference, Rome, Italy	September
T-DO	Bishop	Solid State to Biological Physics	International Conference, Dubrovnik, Croatia	June
T-DO	Bishop	Dynamics Energy Landscapes and Functional Systems	International Workshop, Santa Fe, NM	April
T-DO	Bishop	Unconventional Superconductivity	International Workshop, San Diego, CA	January
T-DO	Chen	Lab Modeling Projects	LANL	October
T-DO	Chen	Lab Modeling Projects	LANL	April
T-DO	Dalvit	Quantum Dynamics, Measurement And Decoherence In Bose-Einstein Condensates	Physics Department, Louisiana State University	
T-DO	Dalvit	Bose-Einstein condensate physics: dynamics and applications	Quantum Institute Workshop	
T-DO	Dalvit	Dynamical Casimir effect via time-dependent conductivity	International Workshop on Dynamical Casimir Effect	
T-DO	Milonni	Quantum Optics Seminar	University of Rochester	March
T-DO	Milonni	Center for Nonlinear Studies Colloquium	Los Alamos National Laboratory	August
T-DO	Milonni	Department of Physics Colloquium	University of Oklahoma	February
T-DO	Milonni	Three lectures	Hong Kong Advanced Study Institute	December
T-DO	Milonni	Welch Week Lecture	University of Toronto	April
T-DO	Paz	Qubits in Phase Space	Invited talk, International conference Quantum Optics II	December
T-DO	Paz	Decoherence in Quantum Computers	4th Canadian Summer School on Quantum Information	July
T-DO	Paz	Decoherence and Quantum Information	72nd Winter School on Theoretical Physics	February
T-DO	Strottman	Level Structure and Scattering in Light Nuclei	DNP Meeting	October
T-DO	Younger	Special Operations and the CBRNE Threat	The Annual Conference of US Special Operations Command	December
T-DO	Younger	Technology and the Fight Against World Terrorism	NMSU/LANL MOU Workshop	December
T-DO	Younger	Sumerians Among Us	University of Museum, University of Philadelphia	September
T-DO	Younger	Simulating the Dynamics of Societies	University of New Mexico	December
T-DO	Younger	Technology and the Fight Against World Terrorism	TechEnterprise 2004 Conference	August
T-DO	Younger	Some Issues Relating the Future International Security	Los Alamos Summer School	July
T-DO	Younger	Simulating the Dynamics of Societies	Los Alamos Summer School	June
T-DO	Younger	Diversity as a Tool in the Flight Against Terrorism	LANL Asian Pacific Islander Diversity Lecture	May
T-DO	Younger	A Retrospective of World Terror Issue	The Biological Threat Reduction	March
T-DO	Zurek	PANEL: The Nature of Quantum Mechanics	Kavli Institute for Theoretical Physics	October
T-DO	Zurek	New Frontiers in Quantum Theory and Measurement	University of Ulm	September
T-DO	Zurek	Bose-Einstein Condensation in Disordered Systems	Disordered Ultracold Atomic Gases	June
T-DO	Zurek	Time in Quantum Mechanics	University de la Laguna	June
T-DO	Zurek	Dynamics of quantum phase transitions	Quantum Information Processing with Atoms, Ions, and Photons	March

Group	Name	Title	Location	Month (2004)
T-DO	Zurek	Quantum Coherence in Matter: From Quarks to Solids	Internationale Universitätswochen für Theoretische Physik	March
T-1	Burakovsky	Unified Analytic Model of the Gruneisen Parameter, Melting Temperature And Shear Modulus	AGU Fall Meeting, San Francisco, CA	December
T-1	Burakovsky	Melting Curves In The Mean-Field Potential Approach: Gold As An Example	Gordon Research Conference, Meriden, NH	June
T-1	Clements	Polymer Behavior Under Dynamic Loading	TCG-1, SNL	November
T-1	Clements	Phase Transitions in Dynamically Loaded Composites	TCG-I, LLNL	October
T-1	Clements	Polymer Behavior Under Dynamic Loading	TCG-1, SNL	October
T-1	Clements	Polymer Behavior Under Dynamic Loading	TCG-1, SNL	April
T-1	Clements	Continuum Models And Associated Experiments For Polymeric Systems Under Dynamic Loads	ARL Seminar, Aberdeen, MD	February
T-1	Crockett	An Introduction to Equation of State and Shock Physics Research	Invited talk at UND	October
T-1	George	Effect of Anisotropic Interfacial Energy on Grain Boundary Distribution during Grain Growth	Precrystallization and Grain Growth	August
T-1	Greeff	Modeling Dynamic Phase Transitions in Zr	JOWOG 32, Aldermaston, UK	November
T-1	Holmstrom	Multilayer Relaxations and the Superposition Principle	T-1 Seminar Series	September
T-1	Johnson	Density Functional Theory Calculations on EOS and Phase Stability of Bc	JOWOG 32, Aldermaston, UK	November
T-1	Kuprat	Modeling Microstructure Evolution in 3D using Anisotropic Energy and Mobility	Materials Theory Seminar, LANL	May
T-1	Kuprat	Moving Mesh Methods And Applications	Dept of Eng. Sci. and Mechanics, Penn State	April
T-1	Mas	SMIS design and preliminary simulations, parallel speed up on EPIC, and direct numerical simulation	IM Hazards Meeting	November
T-1	Mas	Modeling and Simulation for the Munitions and Warhead Fragmentation Impact and Response	TCG-1 review	October
T-1	Mas	Macro to Meso length studies of PBX 9501 for the Thermal and Loading Dynamics of Energetic Materials	TCG-1 review	October
T-1	Mas	Current Modeling Capabilities in T-1	ASCI review for Project Leader	September
T-1	Niklasson	Ab initio response theory for nanomaterials	Workshop, Linkoping University, Sweden	December
T-1	Niklasson	Quantum perturbation theory in O(N)	Physics Department, Uppsala University, Sweden	December
T-1	Niklasson	Quantum perturbation theory in O(N)	Royal Institute of Technology, Stockholm, Sweden	December
T-1	Niklasson	Linear scaling response theory	South Western Theoretical Chemistry Conference, Galveston	October
T-1	Niklasson	Ab initio response theory for nanomaterials	University of Houston	October
T-1	Niklasson	Quantum Perturbation Theory in O(N)	LANL	October
T-1	Niklasson	Ab initio response theory for nanomaterials	Workshop, Semiclassical Molecular Dynamics of Nanostructures	June
T-1	Niklasson	Ab initio response theory of nanomaterials	California Institute of Technology	October
T-1	Niklasson	Reduced complexity theory for nanomaterials	University of California	April
T-1	Niklasson	N-Scaling Quantum Perturbation	Materials Theory Seminar Series	February

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-1	Plohr	Linearized Richtmyer-Meshkov Flow for Elastic Materials	Turbulence-Mixing Meeting	August
T-1	Plohr	Linearized Richtmyer-Meshkov Flow for Elastic Materials	Conference on Analysis, Modeling and Computation of PDE and Multiphase Flow	August
T-1	Rudin	First Principles Calculations of the Thermodynamics of ZrN and U	MMSNF-3	November
T-1	Rudin	Density Functional Theory Calculations on EOS and Phase Stability of Beryllium	JOWOG 32	November
T-1	Rudin	Thermodynamics of Solids from First Principles	CalTech ASCI/ASAP	February
T-1	Wallace	Vibration-Transit Theory Of Monatomic Liquid Dynamics	T-1 Seminar	December
T-3	Addessio	Modeling Composite Materials: A Review of LANL Programs	TCG-I, LLNL	October
T-3	Addessio	Materials Modeling with Application to the Actinides	Campaign 2 Review, Livermore, CA	January
T-3	Addessio	Modeling Zirconium Explosively Formed Projectiles	TCGI Meeting Huntsville, AL	April
T-3	Beyerlein	Substructure Hardening Model for Strain Path Changes in Copper	DOE BES Program Review	November
T-3	Beyerlein	Heterogeneity In Texture Development In Single Pass Equal Channel Angular Extrusion	TMS Society 2004 Charlotte, NC	March
T-3	Beyerlein	Three Dimensional Modeling of Plastic Deformation Flow During ECAP	TMS Society 2004 Charlotte, NC	March
T-3	Beyerlein	Mechanical Properties Of High Purity Copper Processed By Equal Channel Angular Extrusion	TMS Society 2004 Charlotte, NC	March
T-3	Canfield	Results from the TEPLA Material Model in the Shavano Project	NECDC 2004, Livermore, CA	October
T-3	Dukowicz	Improved Density Coordinates of the Potential Density Type for Layer Models	Layered Ocean Model Workshop, Miami, FL	February
T-3	Eggert	Computing Surface Water Hydraulics . . . Parallel Computing Clusters	Seminar at National Center for Atmospheric Research, Boulder, CO	February
T-3	Eggert	A Continental Scale River Modeling Framework . . . Hydraulic Realism	NCAR CCSM Workshop, Santa Fe, NM	July
T-3	Eggert	A Continental Scale River Modeling Framework . . . Hydraulic Realism	NCAR CCSM Workshop, Santa Fe, NM	July
T-3	Hunke	Ice & Ocean Modeling Toward Understanding Global Climate	Los Alamos Women in Science Lunch Talk	June
T-3	Hunke	POP and CICE in the Arctic Ocean Model Intercomparison Project	T-3 Seminar	December
T-3	Hunke	POP and CICE in the Arctic Ocean Model Intercomparison Project	Climate Change Prediction Program Meeting, Seattle WA	October
T-3	Hunke	An Eddy-Admitting Global Ice-Ocean Simulation	Invited talk at the University of Chicago	February
T-3	Hunke	AOMIP: 2 Runs, A Lesson, and 2 Questions	AOMIP Workshop #7 Geophysical Fluid Dynamics Laboratory Princeton, NJ	June
T-3	Johnson	Moderating Strategic Surprise - Through the Eyes of Protecting National Public Health	Avoiding Strategic Surprise: Lessons from Risk Management & Assessment, NYC, NY	December
T-3	Johnson	Diversity: A Weapon of Mass Construction	UCSF Student Enrichment Seminar Series	October

Group	Name	Title	Location	Month (2004)
T-3	Johnson	LANL Chemical & Biological Threat Reduction Program	Visit of Representatives of the Department of National Defense, Government of Canada	April
T-3	Johnson	Los Alamos Homeland Security Programs and Highlights	Invited talk, Remote Sensing Lab, Nellis Air Force Base, NV	April
T-3	Jones	Computational Requirements for Future Climate Simulations	Los Alamos Computer Science Institute Workshop, Santa Fe, NM	October
T-3	Jones	Status and Progress of the Climate, Ocean, and Sea Ice Modeling (COSIM) Project	Climate Change Prediction Program Meeting, Seattle, WA	October
T-3	Jones	Climate, Ocean, and Sea Ice Modeling	Supercomputing 2004 (SC04), Pittsburgh, PA	November
T-3	Jones	Conservative Regridding for Geodessic Climate Models	Geodesic Climate Modeling, Boulder, CO	February
T-3	Jones	Data Requirement For Climate Modeling	DOE/SC Data Mgmt. Workshop at SLAC Menlo Park, CA	March
T-3	Jones	Collaborative Development of the Community Climate System for Terascale Computers	DOE SciDAC PI Meeting, Charleston, SC	March
T-3	Kashiwa	Status of Closure Modeling for Metal-Loaded HE Using DNS	DoD/DOE TCG-IV Warhead Technology Meeting	November
T-3	Kashiwa	A Study of Two-Body Forces in Fluidization	3rd Int'l Conf. on Two Phase Flow Modeling & Experimentation, Italy	September
T-3	Kashiwa	Toward a General Theory for Multiphase Turbulence	DOE/EE/OIT Review Mtg. & AICHE Spring Mtg., New Orleans	April
T-3	Kashiwa	Multifield Closure Modeling for Metal-loaded High Explosives	Warheads & Ballistics Classified Symposium, Monterey, CA	August
T-3	Knoll	On Time Integration Methods and Errors for ASCI Applications	Methods for Comp. Physics, Monterey, CA	March
T-3	Lipscomb	An Incremental Remapping Transport Scheme on a Spherical Geodesic Grid	DOE Cooperative Agreement Meeting, Bethesda, MD	August
T-3	Lipscomb	Comparison of Model- and Satellite-Derived Arctic Sea Ice Thickness	American Geophysical Union Fall Meeting, San Francisco, CA	December
T-3	Lipscomb	Sea Ice Model Development: Toward CICE 4 and CSIM 6	NCAR Community Climate System Model Annual Meeting	July
T-3	Lipscomb	Sea Ice Progress Report	DOE SciDAC Mtg., Boulder, CO	May
T-3	Ma	Enduring Contracts in Dense Granular Material	57th Annual Mtg. of the Division of Fluid Dynamics	November
T-3	Maltrud	The Functional Form of the Ocean . . . Interior Tracer Distributions	AGU Ocean Sciences, Portland, OR	January
T-3	Maltrud	Transit Time Distributions in a Global Ocean Circulation Model	AGU Ocean Sciences, Portland, OR	January
T-3	Maudlin	Tentalum EFP Test Series: Experiments and Analysis	TCG-I Review Meeting, Redstone Arsenal, AL	April
T-3	Mousseau	Transitioning from Interpretive to Predictive in Thermal Hydraulic Codes	Best Estimate Methods in Nuclear Installations Safety, Wash., D.C.	November
T-3	Mousseau	Modern Time Integration Methods Applied to the Thermal Hydraulic Equations	Invited Talk at UC Santa Barbara	September
T-3	Mousseau	A Hybrid Solution Method for the Two-Phase Fluid Flow Equations	12th Int'l Congress on Nuclear Engineering, Arlington, VA	April
T-3	Mousseau	Nonlinear Implicitly Balanced Methods for Nonequillibrium Radiation Diffusion	SIAM Annual Meeting, Portland, OR	July
T-3	Mousseau	A Comparison Between an Implicitly Balanced Solution and a Linearized and Operator Split Solution of the Thermal Hydraulic Equations	Eighth Copper Mountain Conference on Interactive Methods, Copper Mountain, CO	March
T-3	Tonks	Geometric Tolerance Method for Compliant Assembly Tolerance Analysis	ASME DETC	September

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-3	Torres	KIVA-4 Development	DOE National Laboratory Advanced Combustion Engine Merit Review & Peer Evaluation	May
T-3	Torres	Unstructured KIVA	Advanced Engine Combustion Meeting, Livermore, CA	January
T-3	Torres	Unstructured KIVA	Int'l Multi-Dimensional Engine Modeling Users' Group Mtg., Detroit, MI	March
T-3	Torres	KIVA-4 Development	Advanced Engine Combustion Meeting, Detroit, MI	June
T-3	Vanderheyden	Modeling for IED Fragment Capture	Teleconference with US DARPA, Los Alamos NM	April
T-3	Vanderheyden	T-3 Overview: Multiphase Flow	TST Meeting & Workshop, Urbana, IL	May
T-3	Vanderheyden	Modeling for IED Fragment Capture	Teleconference with US DARPA, Los Alamos NM	April
T-3	Vanderheyden	Novel Algorithms for Agent Defeat, Non-Ideal Airblast Simulation and HANE	JOWOG-43/NWEUG Users Group Meeting- Aldermaston, UK	May
T-3	Vanderheyden	Fluid Dynamics Group (T-3) Capabilities and Highlights	STTR & Modeling & Estimating Building Damage Meetings, US Army Research Laboratory, Aberdeen	March
T-3	Vanderheyden	Modeling Friction Initiation of HE	Nuclear Explosives Safety Workshop, SNL	May
T-3	Vanderheyden	Unstructured KIVA	TST Meeting & Workshop, Urbana, IL	May
T-3	Williams	High Explosives Constitutive Modeling	PMC04 LANL Conference	July
T-3	Williams	Physics-Based Modeling of Composite Materials	TMS Conference 2004, New Orleans, LA	September
T-3	Williams	A Stochastic Framework for the Micromechanical Analysis of Composites	Probabilistic Mechanics Conference, Albuquerque, NM	July
T-3	Zhang	Particle-In-Cell Method in Multiphase Flow Simulations	57th Annual Meeting of the Division of Fluid Dynamics, Seattle WA	November
T-3	Zhang	Local Grain-Grain Interactions in Granular Explosive	EMR Review Meeting at LLNL & US/UK	November
T-3	Zhang	Particle-in-Cell Method in Multiphase Flow Simulations	International Union of Theoretical and Applied Mechanics, Argonne, IL	October
T-3	Zhang	Constitutive Behavior of Particle-Polymer Binder Composite	International Conference on Multiphase Flow, Yokohama, JAPAN	May
T-3	Zhang	Enduring Contacts and Dense Granular Flows	Gordon Conference in Granular & Granular-Fluid Flow, Colby College, Waterville, ME	June
T-3	Zhang	Enduring Contacts and Dense Granular Flows	International Conference on Multiphase Flow, Yokohama, JAPAN	May
T-3	Zou	Particle-in-Cell Method in Multiphase Flow Simulations	57th Annual Meeting of the Division of Fluid Dynamics, Seattle WA	November
T-3	Zou	Modeling Friction Initiation of Solid Explosives	57th Annual Meeting of the Division of Fluid Dynamics, Seattle WA	November
T-3	Zou	Multiphase Flow Simulation of Non-Shock Initiation	Energetic Materials Review	November

Group	Name	Title	Location	Month (2004)
T-3	Zou	Multiphase Flow Simulation of Ignition of Solid Explosive	5th International Conf. on Multiphase Flow, Japan	June
T-3	Zuo	Embedded Element for Strain Localization	Campaign 4.2 Workshop, Los Alamos, NM	April
T-3	Zuo	Modeling Fracture and Damage in Ceramics Via Statistical Crack Mechanics	Caltech ASCI Program Site Visit, Los Alamos, NM	February
T-4	Colgan	Comparison of Theory And Experiment For Dielectronic Recombination of Fe Atomic Ions	SESAPS, Oak Ridge, TN	November
T-4	Colgan	R-Matrix-Floquet Theory Of Molecular Multiphoton Processes	ECAMP8, Rennes, France	July
T-4	Colgan	Lattice Calculations of the Photoionization of Li	DAMOP 2004, Tucson, AZ	May
T-4	Colgan	Ionization Cross Section Calculations Of Both Light And Heavy Species For ITER Relevant Studies	APiP Conference, Santa Fe, NM	April
T-4	Colgan	Dielectronic Recombination Calculations For Dynamic Finite Density Plasmas	APiP Conference, Santa Fe, NM	April
T-4	Colgan	Simulations Of Ultracold Plasmas And Cold Rydberg Gases	APiP Conference, Santa Fe, NM	April
T-4	Collins	Quantum Molecular Dynamics Simulations of Warm, Dense Matter	14th APS Topical Conference on Atomic Processes in Plasmas	April
T-4	Hakel	Magnetic-Sublevel Atomic Kinetics Modeling for Line Polarization Spectroscopy	4th International Symposium on Plasma Polarization Spectroscopy	February
T-4	Hu	Imaging Molecular Structures with Few-Cycle Pulses	APS DAMOP Meeting, Tucson, Arizona	May
T-4	Hu	The Inverse ATI Process: Electron-Ion Recombinations In Intense Ultrashort Laser Pulses	APS DAMOP Meeting, Tucson, Arizona	May
T-4	Hu	Phase-Control of Intense, Few-cycle Laser-assisted Recombination	14th APS Topical Conference on Atomic Processes in Plasmas	April
T-4	James	Quantum Algorithms for Small Quantum Computers	University of Innsbruck, Austria	November
T-4	James	Quantum Teleportation	Quantum Optics Seminar, Dept. of Physics and Astronomy, University of Rochester, Rochester, NY	October
T-4	James	Correlation-induced spectral (and other) changes	Frontiers in Optics/OSA Annual Mtg., Invited Talk, Rochester, NY	October
T-4	James	Quantum Teleportation	Oklahoma State University, Physics Colloquium	September
T-4	James	Quantum Teleportation	Quantum Enabled Science and Technology Summer Retreat	August
T-4	James	Quantum State and Process Tomography	University of Innsbruck, Austria	May
T-4	James	Effective Hamiltonians Theory and Its application to Trapped Ion Quantum Computers	University of Innsbruck, Austria	May
T-4	James	Quantum State and Process Tomography	Imperial College	April
T-4	James	Quantum State and Process Tomography	University of Cambridge	April
T-4	James	Quantum State and Process Tomography	University of Oxford	April
T-4	James	Quantum State and Process Tomography	University of Bristol	April
T-4	Karkuszewski	Depletion and evolving condensates	Quantum Lunch Seminar	December
T-4	Karkuszewski	Spectral analysis of short time signals	DAMOP 2004, Tucson, AZ	May
T-4	Kilcrease	Los Alamos Opacities: Transition from LEDCOP to ATOMIC	14th APS Topical Conference on Atomic Processes in Plasmas	April

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-4	Kilcrease	CHEMEOS: A New Chemical-Picture-Based Model for Plasma Equation-of-State Calculations	14th APS Topical Conference on Atomic Processes in Plasmas	April
T-4	Kilcrease	Finite Temperature Random Phase . . . Hot and Dense Plasmas	14th APS Topical Conference on Atomic Processes in Plasmas	April
T-4	Kilcrease	Alignment Creation by Elastic Scattering: A Quantum Treatment	Fourth International Symposium on Plasma Polarization Spectroscopy	February
T-4	Kilcrease	Using Line Shifts as a Spectral Diagnostic	11th Int'l Workshop on Radiative Properties of Hot Dense Matter	November
T-4	Kilcrease	Equation of State, Occupation Probabilities and Opacity Results from the New Los Alamos Opacity Code ATOMIC	11th Int'l Workshop on Radiative Properties of Hot Dense Matter	November
T-4	Magee	Los Alamos Opacities: Transition from LEDCOP to ATOMIC	14th Topical Conference on Atomic Processes in Plasmas, Santa Fe, NM	April
T-4	Ponomarenko	Generating Solitons With A Flash-Light	University of North Carolina	February
T-4	Sherrill	Coupled Electron An Atomic Kinetics Through The Solution . . . X-ray Spectra	Radiative Properties of High Dense Matter, Santa Barbara, CA	November
T-4	Timmermans	Progress On Cold Atom Fermi-Gas Physics And Feshbach Resonances	Mini-workshop at Institute of Nuclear Theory, U. of Washington	November
T-4	Timmermans	The Quest For Atom Trap Fermion Superfluidity, Tales From The Ultra-Low Temperature Frontier	Colloquium at Boston College Physics Department	March
T-4	Timmermans	Feshback Resonance Cold Atom Pairing As Coupled Channel Superfluidity	Santa Barbara Workshop on Quantum Gases	July
T-4	Timmermans	Cold-atom fermion-BEC mixtures: cold atom alchemy	Joint Harvard-ITAMP Colloquium	December
T-6	Cox	Predictions of Periods and Growth Rates for Solar g-Modes	SOHO14-GONG2004 Helio- and Asteroseismology: Towards a Golden Future	July
T-6	Heger	Pulsar Kicks and a Pulsational Analysis of the Cores of Massive Stars	204th AAS Meeting	June
T-6	Heger	Supernovae, Gamma-Ray Bursts, and Stellar Rotation	The Fate of the Most Massive Stars	May
T-6	Heger	Stability of SN Ia progenitors against radial oscillations	12th Workshop Nuclear Astrophysics	March
T-6	Heger	Breaking Gravity Waves: A Mechanism for Nova Enrichment	12th Workshop Nuclear Astrophysics	March
T-6	Heger	The fate of the First Stars	University of Illinois, Urbana-Champain	December
T-6	Heger	Models for Type I X-Ray Bursts	University of Notre Dame	October
T-6	Heger	Massereiche Sterne, Kosmische Explosionen, und die Entstehung der Elemente	Universitaet Heidelberg	October
T-6	Heger	Numerical Models of X-ray Bursts	CalTech	April
T-6	Heger	The Fate of the First Stars	UCSB	April
T-6	Heger	Nucleosynthesis of Pop III Stars	Nuclear Astrophysics XII	March
T-6	Heger	s- and p- Process in Massive Stars	New opportunities and challenges with DANCE Workshop	February
T-6	Heger	Evolution and Nucleo-synthesis of Massive Stars	Colloquium, University of Notre Dame	October
T-6	Heger	Evolution and Fate of the First Stars	Post-Nishinomiya-Yukawa Symposium	November
T-6	Heger	The Evolution and Fate of the First Massive Stars	204th AAS Meeting	June

Group	Name	Title	Location	Month (2004)
T-6	Heger	IMBH Formation from the Evolution of Very Massive Stars	Making Waves with Intermediate-Mass Black Holes	May
T-6	Heger	Flickering Neutron Stars	Nuclear Physics and Astrophysics of Accreting Neutron Stars	April
T-6	Heger	Final Stages of the Most Massive Stars	The Fate of the Most Massive Stars	May
T-6	Herwig	Mixing, Nucleosynthesis, And Stellar Yields Of Intermediate Mass Stars	ESO-Arcetri workshop: Chemical Abundances and Mixing in the Milky Way and its Satellites	September
T-6	Herwig	Evolution And Nucleosynthesis Of AGB Stars	Near- and mid-IR studies in or near the Local Group	April
T-6	Holz	Safety In Numbers	Texas Symposium	December
T-6	Holz	Gravitational-Wave Standard Candles, Gravitational Lensing, And Cosmology	Institut d'Astrophysique de Paris seminar	November
T-6	Holz	Gravitational Lensing Of Standard Candles And Dark Energy	GR17	July
T-6	Holz	Looking through a gravitational lens, darkly	NYU Seminar	February
T-6	Holz	Cosmology	National Academy/Royal Society Symposium	June
T-6	Luu	Electromagnetic Excitation Rates Of Nuclear Isomers In A Hot Dense Plasma	Fall DNP Chicago	October
T-6	Luu	Bloch-Horowitz Schemes	Microscopic Nuclear Structure Theory	October
T-6	Luu	Applying The Bloch-Horowitz Equation To p-Shell Nuclei	Novel Approaches to the Nuclear Many-Body Problem: From Nuclei to Stellar Matter	September
T-6	Mihaila	Variational Approach To Cold Fermionic Atom Superfluidity	Annual APS March Meeting	March
T-6	Mihaila	Analysis Of Np-237 ENDF For The Theoretical Interpretation Of Critical Assembly Experiments	Fall Meeting of the Division of Nuclear Physics	October
T-6	Mihaila	The Origin Of Elements, Life As We Know It, And The Future Of Computational Nuclear Physics	Cal Poly Pomona, Physics Department seminar	May
T-6	Mihaila	Continuum Coupled-Cluster Expansion Approach To Nuclear Structure	Int'l Workshop on Microscopic Approaches to Nuclear Structure Calculations	July
T-6	Mihaila	On two-approaches to the Coupled-Cluster Expansion	INT Workshop	October
T-6	Timmes	Radiation Hydrodynamics In Astrophysics	Transport Methods and Phenomena	July
T-6	Timmes	Radiation Hydrodynamics In Astrophysics	Institute for Nuclear Theory	July
T-6	Timmes	Changing the r-Process Paradigm	Institute For Nuclear Theory	July
T-6	Timmes	Transient Astrophysics at Los Alamos	Earthwatch 2004	November
T-6	Timmes	Nuclear astrophysics with neutron facilities at LANL and RIA	Rare Isotope Accelerator - Theory Working Group	October
T-6	Timmes	Variations in Type Ia Supernova	Chemical Enrichment of the Early Universe	September
T-6	Timmes	Flames	Supernova Theory and Nucleosynthesis	July
T-6	Warren	The Distribution of Dark Matter in the Universe	Proc. of the XXXIXth Rencontres de Moriond	May
T-6	Warren	Reasonably Secure Linux on the Desktop	LANL System Administrators	August
T-6	Warren	Using Fast Parallel N-body Methods to Determine the Mass Function of Dark Matter Halos	UNM Applied Mathematics Colloquium	October

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-6	Warren	The Halo Mass Function from Simulations	Fundamental Physics from Galaxy Clusters	December
T-6	Warren	Computational Astrophysics	LANL briefing of Ed Barsis on Petaflops Computing	May
T-6	Warren	Halo Bias from N-body Simulations	LANL Cosmology Day	April
T-6	Warren	How Precise are the Mass Distributions derived from N-body Simulations?	The Large-scale Distribution of Mass & Light in the Universe	January
T-7	Berndt	Parameter estimation via risk-based optimization	SIAM Annual Meeting	July
T-7	Berndt	Line and Plane Relaxation in parallel BoxMG	Copper Mountain Conference on Iterative Methods	March
T-7	Chartrand	Muon radiography for threat detection	Montana State University, Physics Colloquium, invited talk	September
T-7	Chartrand	A gradient descent solution to the Monge-Kantorovich problem	UC Berkeley, PDE Seminar, invited talk	October
T-7	Chartrand	A gradient descent solution to the Monge-Kantorovich problem	UCLA, Applied Mathematics Colloquium, invited talk	October
T-7	Chartrand	A gradient descent solution to the Monge-Kantorovich problem	Montana State University, DynaChat	September
T-7	Chartrand	A gradient descent solution to the Monge-Kantorovich problem	Clarkson University, Mathematics Colloquium, invited talk	September
T-7	Chowell-Puente	Mathematical models for Emergent and Re-Emergent Infectious Diseases	Mathematics Seminar	October
T-7	Chowell-Puente	Transmission Dynamics of SARS and the Effects of Public Health Interventions	Mathematical Biology Seminar	March
T-7	Dendy	Alternative RAP	Copper Mountain Iterative Methods Conference	March
T-7	Dyadechko	On the Aulisa-Manservisi-Scardovelli (AMS) marker redistribution method for 2D interface tracking	Hydro Project Seminar, Los Alamos, NM	December
T-7	Dyadechko	Reference Jacobian Rezoning Strategy for Arbitrary Lagrangian-Eulerian Methods on Polyhedral Grids	13th International Meshing Roundtable, Williamsburg, VA	September
T-7	Garimella	MSTK - A Flexible Infrastructure Library for Developing Mesh-based Apps	13th International Meshing Roundtable, Williamsburg, VA	September
T-7	Hagberg	NetworkX: Growing a Python-based Toolbox for Complex Networks	SciPy04, California Institute of Technology, Pasadena, CA	September
T-7	Hagberg	Bloch-Front Turbulence in a Periodically Forced Belousov-Zhabotinsky Reaction	XIV Conf. on Nonequilibrium Stat. Mechanics and Nonlinear Physics, La Serena, Chile	December
T-7	Holm	Soliton dynamics in computational anatomy	Conf. on Mathematics in Brain Imaging, UCLA, Los Angeles, CA	July
T-7	Holm	Lagrangian averaged Navier-Stokes-alpha (LANS-alpha) equations for modeling circulation in turbulence	UK Met Office Colloquium, Exeter, UK	June
T-7	Holm	Weak solution interactions in nonlinear internal waves and in computational anatomy	Invited Lecture, IPAM Summer School on Mathematics of Brain Imaging, UCLA	June
T-7	Holm	Background and recent results for LANS-alpha, the Lagrangian averaged Navier-Stokes alpha model of turbulence	Sub-Grid Scale Turbulence Workshop, Boulder, CO	April
T-7	Holm	Euler-Poincaré Equations, with Applications from Solitons to Turbulence	Imperial College London	January
T-7	Hyman	Good Choices for a Great Career in Sci. Computing	Arizona Mathematics Undergrad Conference	November
T-7	Hyman	Career Opportunities in Applied Math.	St. Olaf College	November

Group	Name	Title	Location	Month (2004)
T-7	Hyman	Good Choices for a Great Career in Scientific Computing	U of Texas, Austin, Texas	November
T-7	Hyman	Multiscale modeling of infectious diseases	U of Texas, Austin, Texas	November
T-7	Hyman	Mathematical Models for the Spread of Epidemics	Center for Combinatorics, Nankai University, Beijing/Tianjin, China	June
T-7	Hyman	Comparing and combining agent based and differential equation models for the spread of epidemics	Institute of Computational Mathematics, Chinese Academy of Sciences No. 55, Beijing, China	June
T-7	Hyman	Using Mathematical Models to Better Understand How Epidemics Spread	Department of Applied Mathematics, College of Science Xi'an Jiaotong University, China	June
T-7	Hyman	Bridging multiple time and space scales in numerical simulations	International Workshop on Wave Propagations, Tsinghua University, Beijing, China	June
T-7	Hyman	Modeling the Spread of Disease on Dynamic Networks	Peking University, Beijing, China	June
T-7	Hyman	Optimal Vaccine Strategies Based on an Agent Based Model for the Spread of Epidemics in Portland	SIAM Annual Meeting, Portland, OR	July
T-7	Hyman	Patch Dynamics for Multiscale Simulations	SIAM Annual Meeting, Portland, OR	July
T-7	Jiang	Ripples and Aggregates of Myxobacteria	Symposium on Biological Systems and Soft Materials: Future Directions in Statistical Physics	March
T-7	Kurien	Helicity and the Kolmogorov Phenomenology of Turbulence	Purdue University, Earth and Atmospheric Sciences Seminar, Invited Speaker	February
T-7	Kurien	Symmetry breaking in turbulent velocity statistic - Rotation and Reflection	Purdue University, Mathematics Seminar, Invited Speaker	February
T-7	Kurien	Symmetry breaking in turbulent velocity statistic - Rotation and Reflection	University of Central Florida, Mathematics Special Colloquium, Invited Speaker	February
T-7	Kurien	Helicity and the Kolmogorov Phenomenology of Turbulence	University of Illinois, Mechanical Engineering Colloquium, Invited Speaker	April
T-7	Kurien	Helicity and the Kolmogorov Phenomenology of Turbulence	Center for Nonlinear Studies Seminar	April
T-7	Kurien	Anomalous scaling of low-order turbulence velocity statistics	Center for Nolinear Studies Seminar	July
T-7	Kurien	Cascade timescales for energy and helicity in isotropic homogeneous turbulence	University of New Mexico, American Mathematical Society Sectional Meeting	October
T-7	Li	Adaptive mesh refinement and its application for MHD	Int'l Workshop on Recent Advance of the Adaptive Method, China	May
T-7	Li	A modern parallel AMR framework for hydrodynamics and magnetohydrodynamcs	Numerical seminar, Los Alamos	July
T-7	Lipnikov	Error-Minimization-Based rezone strategy for ALE methods	8th Copper Mountain Conference, Copper Mountain, CO	April
T-7	Lipnikov	New mimetic discretizations of diffusion-type problems on polygonal meshes	Los Alamos National Laboratory, Los Alamos, NM	May
T-7	Lipnikov	Poster New mimetic discretizations of diffusion-type problems on polygonal meshes	IMA workshop Compatible Spatial Discretizations for Partial Differential Equations	May
T-7	Lipnikov	The EMB rezone strategy for ALE methods	SIAM annual meeting, Portland, OR	July

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-7	Lipnikov	Error estimates for Hessian-based mesh adaptation algorithms with control of adaptivity	International Meshing Roundtable, Williamsburg, VA	September
T-7	Lipnikov	Convergence of mimetic finite difference method for diffusion problems on polyhedral meshes	LACSI Symposium, Santa Fe, NM	October
T-7	Loubere	Polygonal Untangling and Smoothing Used in Arbitrary-Lagrangian-Eulerian Compressible Fluid Flow Context	2004 SIAM Annual meeting	July
T-7	Loubere	An Arbitrary-Lagrangian-Eulerian Code for General Polygonal Mesh: Ale Inc.	2004 SIAM Annual meeting	July
T-7	Loubere	ALE INC: a 2D ALE code on polygonal staggered grids for compressible hydro problems	Copper Mountain Conference on Iterative Methods, Copper Mountain, CO	March
T-7	Loubere	A 2D ALE code on general polygons for shock wave simulation	Int. Conf. New Models and Hydro-Codes for Shock Wave Simulation	May
T-7	Moulton	Mimetic Preconditioners for Mixed Discretizations of the Diffusion Equation	Compatible Spatial Discretizations for Partial Differential Equations, University of Minnesota, MN	May
T-7	Moulton	Performance Tuning of Structured Black Box Multigrid for Massively Parallel Distributed Hierarchical Memory Architectures	SIAM Conference on Parallel Processing for Scientific Computing, San Francisco, CA	February
T-7	Moulton	Performance Tuning of Parallel Structured Multigrid	Copper Mountain Conference on Iterative Methods, Copper Mountain, CO	March
T-7	Moulton	Mimetic Preconditioning of Mixed-Hybrid Discretizations	Los Alamos Computer Science Institute Symposium, Santa Fe, NM	October
T-7	Shashkov	Mimetic Finite Difference Methods for Partial Differential Equations and Discrete Vector and Tensor Analysis	Invited Talk, LLNL	December
T-7	Shashkov	Convergence of Mimetic Finite Difference Method for Diffusion Problems on Polyhedral Meshes	Los Alamos Computer Science Institute Symposium, Santa Fe, NM	October
T-7	Shashkov	Mimetic Finite Difference Discretization of Diffusion-Type Problems on Unstructured Polyhedral Meshes	Los Alamos Computer Science Institute Symposium, Santa Fe, NM	October
T-7	Shashkov	Reference Jacobian Rezoning Strategy Arbitrary Lagrangian-Eulerian Methods on Polyhedral Grids	13th International Meshing Roundtable, Williamsburg, VA	September
T-7	Shashkov	Error-Minimization-Based Rezone Strategy for ALE methods	SIAM Annual Meeting, Portland, OR. USA	July
T-7	Shashkov	Polygonal Untangling and Smoothing Used in Arbitrary-Lagrangian-Eulerian Compressible Fluid Flow Context	SIAM Annual Meeting, Portland, OR. USA	July
T-7	Shashkov	2D Arbitrary Lagrangian-Eulerian (ALE) Code on Polygonal Grids for Shock Wave Simulations	International Conference on New Models and Hydrocodes for Shock Wave Processes, College Park, MD	May
T-7	Shashkov	Mimetic Finite Difference Methods for Partial Differential Equations and Discrete Vector and Tensor Analysis	IMA "Hot Topics" Workshop: Compatible Spatial Discretizations for Partial Differential Equations, Minneapolis, MN	May
T-7	Shashkov	Error Minimization-Based Rezone Strategy for ALE Methods	Eight Copper Mountain Conference on Iterative Methods	March
T-7	Shashkov	ALE from ART to Science?	ASCI Workshop on Methods for Coupled Multi-Physics, Monterey	March

Group	Name	Title	Location	Month (2004)
T-7	Shashkov	ALE Inc.: A 2D Arbitrary Lagrangian-Eulerian Code on Polygonal Staggered Grids for Compressible Hydrodynamics Problems	Eight Copper Mountain Conference on Iterative Methods	March
T-7	Shashkov	Constrained Interpolation (Remap) of Divergence-Free Fields	1st Chilean Workshop on Numerical Analysis of Partial Differential Equations, Universidad de Concepcion, Chile	January
T-7	Staley	Conservative Remapper (a.k.a. CORE)	LANL	August
T-7	Staley	Presentation on my current projects (CORE software, Setup project, Marmot project)	Given to the Numerical Analysis Team	November
T-7	Staley	Conservative Remapper (a.k.a. CORE): A Software Component for Conservative Remapping	Given to the Numerical Analysis Team	March
T-7	Staley	A New Software Component for Swept-Region and Exact-Intersection Remapping in Arbitrary Lagrangian-Eulerian Codes	LANL Numerical Analysis Seminar series	January
T-7	Tartakovsky	Random domain decomposition for transport in highly heterogeneous aquifers	AGU Fall Meeting, San Francisco, CA	December
T-7	Tartakovsky	Asymptotic analyses of three-dimensional pressure interference tests	European Geosciences Union General Assembly, Vienna, Austria	April
T-7	Tartakovsky	A perturbation solution to the transient Henry problem for seawater intrusion	XV Int. Conf. Computational Methods in Water Resources, Chapel Hill, NC	June
T-7	Tartakovsky	Uncertainty quantification for flow in highly heterogeneous porous media	XV Int. Conf. Computational Methods in Water Resources, Chapel Hill, NC	June
T-7	Vixie	Image Analysis as an Inverse Problem: Metrics, Regularization and Geometric Analysis	U. Minnesota/IMA, invited talk	December
T-7	Vixie	Image Analysis as an Inverse Problem: Metrics, Regularization and Geometric Analysis	ISR Division Colloquium, invited talk	December
T-7	Vixie	Exact Solutions for L1TV	Banff International Research Station, MIAP, invited talk	October
T-7	Vixie	Geometric Analysis: and Introduction and Examples	Clarkson University, invited talk	September
T-7	Vixie	Metrics for the comparison of data and simulation	LANL	June
T-7	Wohlberg	Random Domain Decomposition for Transport in Highly Heterogeneous Aquifers	AGU Fall Meeting, San Francisco	December
T-7	Wohlberg	Lifted linear phase filter banks and the polyphase-with-advance representation	11th IEEE Digital Signal Processing Workshop, Taos, NM	August
T-8	Abazajian	Neutrino Clustering in Cold Dark Matter Halos	ECT* Workshop on Neutrinos and the Early Universe	October
T-8	Abazajian	Chemical Enrichment at z=10^9	Chemical Enrichment in the Early Universe	August
T-8	Abazajian	Cosmology from the Deeply Nonlinear Regime: the SDSS Two-point Correlation Function	Santa Fe Cosmology Workshop	July
T-8	Abazajian	Neutrino Dark Matter Clustering: Analytic and Numeric Predictions	Moriond Conference on Exploring the Universe Contents and Structures of the Universe	April
T-8	Abazajian	The Galaxy Dark Matter Halo Occupation, Two-point Correlation and Cosmology	Aspen Winter Conference on Astrophysics	January
T-8	Bhattacharya	Active feedback cooling in cavity	SQUINT04	February

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-8	Cooper	Exact Solitary Wave Solutions to the Discrete Version of Lambda Phi^4 Field Theory	Los Alamos National Laboratory	December
T-8	Cooper	Need for a Virtual Phenomenology Institute	APS-DPF Meeting	September
T-8	Cooper	Understanding the Dynamics of Coherent Structures in Non-Linear Dynamical Systems	Santa Fe Institute	June
T-8	Cooper	Variational Approaches to Soliton Dynamics, Quantum Phase Transitions and Thermalization of Quantum Fields	Johns Hopkins University	April
T-8	Cooper	Variational Approaches to Soliton Dynamics, Quantum Phase Transitions and Thermalization of Quantum Fields	Cornell University	February
T-8	Friedland	What can solar neutrino experiments tell us about neutrino interaction with matter?	P-25 Seminar, Los Alamos National Laboratory	January
T-8	Friedland	Solar Neutrinos as Probes of Neutrino-Matter Interactions	Cornell University, Particle Theory Seminar	April
T-8	Friedland	Solar Neutrinos as Probes of Neutrino-Matter Interactions	California Institute of Technology, High Energy Physics Seminar	May
T-8	Friedland	Solar Neutrinos as Probes of Neutrino-Matter Interactions	Stanford Linear Accelerator Center, Theory Group Seminar	May
T-8	Friedland	Solar Neutrinos as Probes of Neutrino-Matter Interactions (Poster)	XXI International Conference on Neutrino Physics and Astrophysics	June
T-8	Friedland	Solar Neutrinos as Probes of Neutrino-Matter Interactions	Aspen Center for Physics, Lepton Number Violation: Neutrinos, Leptogenesis, Grand Unified Theories and Beyond	July
T-8	Friedland	Measuring Neutrino Interactions with Atmospheric Neutrinos	Institute for Advanced Study	October
T-8	Friedland	Solar and Atmospheric Neutrinos and Non-Standard Neutrino Interactions	XXI International Conference on Neutrino Physics and Astrophysics	June
T-8	Friedland	Non-Standard Neutrino Interactions and Neutrino Oscillations	APS 2004 Meeting of the Division of Particles and Fields	August
T-8	Friedland	Measuring Neutrino Interactions with Atmospheric Neutrinos	T-8 Seminar, Los Alamos National Laboratory	October
T-8	Friedland	Probing Neutrino Interactions with Solar and Atmospheric Neutrinos	High Energy Physics Seminar at New York University	October
T-8	Gupta	Opportunities and Challenges for a Computational Science Center	Invited Talk at Brown University	November
T-8	Gupta	Teen Freedoms, Sexual Health, and Making the Right Choices	UNIDOS 2004	November
T-8	Gupta	The Future of the Poor, Illiterate, and Marginalized Populations	Center for International Security and Cooperation	October
T-8	Gupta	The Future of the Poor, Illiterate, and Marginalized Populations	Woodrow Wilson Center	September
T-8	Gupta	Phenomenology from Lattice QCD	PASCOS 2004	September
T-8	Gupta	Calculating epsilon'/epsilon using HYP Staggered Fermions	Lattice 2004	June
T-8	Habib	Large-Scale Cosmological Simulations	LANL/NRAO Mini-Symposium	November
T-8	Habib	Quantum Nonlinear Dynamics	Workshop on Nonlinear Dynamics in Astronomy and Physics	November
T-8	Habib	Quantum Feedback Control in Nanomechanics	Principles and Applications of Control in Quantum Systems	August
T-8	Habib	Velocity Fields with the SDSS	Fermilab	June
T-8	Habib	Cosmological Foundations or Night Thoughts of a Working Cosmologist	Public Talk, Bradbury Science Museum	June

Group	Name	Title	Location	Month (2004)
T-8	Habib	Three Aspects of the Primordial Fluctuation Power Spectrum	Invited Talk, New Mexico State University	April
T-8	Habib	Numerical Simulations for the Sloan Digital Sky Survey	Sloan Digital Sky Survey Collaboration Meeting	March
T-8	Mottola	Dark Energy and Condensate Stars: Casimir Energy in the Large	6th Workshop on Quantum Field Theory Under the Influence of External Conditions, QFEXT03	June
T-8	Mottola	Macroscopic Effects of the Trace Anomaly	University of California, Riverside	October
T-8	Mottola	Macroscopic Effects of the Trace Anomaly	Dark Energy: Aspen Center for Physics	September
T-8	Mottola	Macroscopic Effects of the Trace Anomaly	University of Michigan	May
T-8	Mottola	Macroscopic Effects of the Trace Anomaly	New York University	February
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	University of California, Riverside	October
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	University of California, Los Angeles	October
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	University of Colorado	October
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	Ohio State University	September
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	New York University	February
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	University of Maryland	January
T-8	Mottola	Gravitational Condensate Stars: An Alternative to Black Holes	University of Michigan	May
T-8	Nieto	Antineutrino Detection for Non-Proliferation	Mini-Symposium on Dev. in Nuclear Structure and Reaction Theory for Astrophysics Stockpile Stewardship	October
T-8	Nieto	The Pioneer Anomaly: The Data, Its Meaning, and a Possible Test	Research and Scientific Support Department Seminar, ESTEC	September
T-8	Nieto	Controlled Antihydrogen Propulsion for Future Missions into Very Deep Space	Advanced Concepts Team Seminar, ESTEC	September
T-8	Nieto	The Pioneer Anomaly: The Data, Its Meaning, and a Future Test	Second Mexican Meeting on Math. and Experimental Physics	September
T-8	Nieto	Controlled Antihydrogen Propulsion for NASA's Future in Very Deep Space	Conference on the Pioneer Anomaly, ZARM, U. of Bremen	May
T-8	Nieto	A Mission to Test the Pioneer Anomaly	Conference on the Pioneer Anomaly, ZARM, U. of Bremen	May
T-8	Nieto	Finding the Origin of the Pioneer Anomaly	Conference on the Pioneer Anomaly, ZARM, U. of Bremen	May
T-8	Nieto	Controlled Antihydrogen Propulsion for NASA's Future in Very Deep Space	NASA/JPL 2004 Workshop in Fundamental Physics	April
T-8	Shirman	Deconstruction of AdS and Chiral Gauge Theories	Frontiers Beyond the Standard Model II	October
T-8	Shirman	A Second Look at Anomaly Mediation	12th International Conference on Supersymmetry and the Unification of Fundamental Interactions	June
T-8	Shirman	A Second Look at Anomaly Mediation	QUARKS 2004: 13th International Seminar on High Energy Physics	May
T-8	Steck	Quantum Control in Atom Optics: Present and Future	Colloquium, University of Oregon	February
T-8	Steck	Quantum Control in Atom Optics: Present and Future	Seminar, University of British Columbia	March

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-8	Steck	Quantum Feedback Control of Atomic Motion in Cavity QED	Seminar, Universidade Federal do Rio de Janeiro	August
T-8	Xu	Measurements of cosmological parameters using long duration Gamma-ray bursts	A Workshop on Studies of Dark Energy and Cosmology from X-ray Cluster Surveys	January
T-8	Xu	Application of Voronoi Tessellation on Finding Large-scale Structures	20th Annual NM Astrophysics Symposium	October
T-8	Xu	Application of Voronoi Tessellation on Finding Large-Scale Structures	Fundamental Physics from Galaxy Clusters	December
T-10	Blinov	The EcoTFs Database: Escherichia Coli Transcription Factors and Signals	RECOMB 2004	March
T-10	Blinov	Modeling and analysis of Combinatorial Complexity in signal transduction	ICCS 2004	March
T-10	Blinov	Rule based modeling of multi-component species	9th SMBL Forum	October
T-10	Blinov	Modeling and analysis of signal transduction Without Ignoring Their Combinatorial Complexity	5th International Conference on Systems Biology	October
T-10	Blinov	Bionetgen: A Modeling Tool That Handles Combinatorial Complexity	Mathematical Models in Signaling Systems, Vanderbilt University	June
T-10	Bruno	Overview of Computational Biology Research in T-10 with emphasis on Sequence Characterization and Attribution	Bioscience Capabilities overview meeting, UNM/DTRA	April
T-10	Bruno	Quantitative Measurement of Covariation on Evolutionary Tree with Application to Contact Prediction	CASP 6 Meeting	December
T-10	Dahari	Non-cytolytic HCV clearance and early blockade of viral production indicated by mathematical modeling of primary HCV infection in chimpanzees	Models and methods in Immunology	February
T-10	Dahari	Non-cytolytic HCV clearance and early blockade of viral production indicated by mathematical modeling of primary HCV infection in chimpanzees	Israel Association for the Study of Liver (IsASL)	March
T-10	Dahari	Effects of PEG-IFN-Alpha 2a (40kD) dose reduction, . . . in the DITTO-HCV study	AASLD	October
T-10	Faeder	Mathematical and Computational Modeling of Signal Transduction	The Science of Intelligent Systems, UNM	December
T-10	Faeder	Mathematical and Computational Modeling of Signal Transduction	Biophysics Colloquium, Cornell University	December
T-10	Faeder	Mathematical and Computational Modeling of Signal Transduction	Immunology Seminar SERIS, University of Virginia	October
T-10	Faeder	Mathematical and Computational Modeling of Signal Transduction	Gold Group Seminar series UNM Health Science Center	November
T-10	Faeder	Mathematical Models of Cell Signaling: Complex Complexes	Los Alamos Summer School	June
T-10	Faeder	Modeling combinatorial complexity in cell signaling	Mathematical Models in Signaling Systems	June
T-10	Faeder	Mathematical Models of Cell Signaling: Complex Complexes	UNM Biocomplexity Seminar Series	February
T-10	Faeder	Modeling Complex formations in signal transduction what we've learned so far	2nd NM workshop on Computational Cell Biology	January
T-10	Faeder	Investigating the Role of Complex Formation in Immunoreceptor Signaling Using Mathematical Modeling	12th International Congress of Immunology and 4th Annual Conference of FOCIS	Jul03
T-10	Frauenfelder	Protein energy landscape and fluctuations	Inst. for Pure Applied Mathematics	June
T-10	Frauenfelder	The First Moessbauer Conference	APS	May

Group	Name	Title	Location	Month (2004)
T-10	Frauenfelder	Discussant	ICAM Workshop	April
T-10	Frauenfelder	The EL in Proteins and Glasses	Dynamic Energy Landscapes and Functional Systems	March
T-10	Frauenfelder	Proteins and Glasses	University of Cincinnati	November
T-10	Frauenfelder	Physics of Proteins	Iowa State Colloquium	April
T-10	Frauenfelder	Physics of Proteins	UNM Physics Dept. Seminar	December
T-10	Frauenfelder	The Energy Landscape and Dynamics of Proteins	Chemistry and Physics Colloquium	October
T-10	Frauenfelder	The Energy Landscape and Dynamics of Proteins	University of Strasbourg France	May
T-10	Frauenfelder	The Energy Landscape and Dynamics of Proteins	ICBP 2004	August
T-10	Frauenfelder	The Energy Landscape in Proteins A Paradigm of Stochastic Complexity	Workshop, New Horizons in Stochastic Complexity	September
T-10	Frauenfelder	Fluctuations Control Biomolecular Processes	SPIE International Conference on Fluctuations and Noise	May
T-10	Frauenfelder	The Energy Landscape and Dynamics of Proteins	ISIS University of Pasteur	May
T-10	Frauenfelder	Protein Dynamics	Biozentrum University of Basel, Switzerland	May
T-10	Garcia	Simulations of the folding/unfolding Thermodynamics of Protein Al	2nd Multiscale Materials Modeling Conference	June
T-10	Garcia	Atomic simulations of protein folding, binding and aggregation	pre-Protein Society Symposium	August
T-10	Garcia	Role of water in protein folding, binding and aggregation	2004 Gordon Conference	August
T-10	Garcia	Simulations of the folding/unfolding Thermodynamics of Protein Al	59th Calorimetry Conf.	June
T-10	Garcia	Atomic Simulation of the Insertion and Folding of a Protein into a Membrane	Biological Membranes: Emerging Challenges at the Interface Between Theory Computer Simulation and Experiment	June
T-10	Garcia	Detailed Atomistic Simulation of protein folding	Colloquium, Rensselaer Polytechnic Institute	June
T-10	Garcia	Simulations of the folding/unfolding Thermodynamics of Protein Al	UCLA Inst. for Pure and Applied Mathematics Workshop III	May
T-10	Garcia	Atomistic simulations of protein folding	FSU, School of Computational Science and Info. Tech.	April
T-10	Garcia	Describing the folded and unfolded state of proteins by simulations	UCSF, Dills Group	April
T-10	Garcia	Exploring the folding energy landscape of proteins	DELFS 04	April
T-10	Garcia	Detailed Atomistic Simulation of protein folding	UCSD, Center for Theo. Biol. Physics Seminar	March
T-10	Garcia	Detailed Atomistic Simulation of protein folding	NMSU Physics Colloquium	February
T-10	Garcia	Folding Mechanisms	Second Gordon Research Conference On Protein Folding	February
T-10	Garcia	Folding a protein in a computer	CNLS Annual Conference	May
T-10	Garcia	Folding a protein in a computer	Johns Hopkins colloquium	February
T-10	Garcia	Modeling DNA Bubble Formation at the Atomic Scale	Second International Conference on Multiscale Modeling	October
T-10	Garcia	Exploring the Energy Landscape of Proteins	Second International Conference on Multiscale Modeling	October

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-10	Garcia	Reversible Temperature and Pressure Denaturation of a Protein Fragment: A Replica Exchange Molecular Dynamics Simulation Study	HPBB 2004	September
T-10	Garcia	Molecular Dynamics Study of Hydration of the Protein Interior	Computational Physics	September
T-10	Garcia	Atomic Simulations of Protein Folding, Binding, and Aggregation	Algorithms for Macromolecular Modeling	August
T-10	Gnanakaran	Nature of structural inhomogeneities on folding a helix/their influence on spectral measurements	Arizona Days Conference	January
T-10	Gnanakaran	Connecting the wiggling and jiggling of atoms to measurements	Univerity of Arizona	January
T-10	Gnanakaran	Folding studies at atomic resolution: Understanding structural manifestations on measurements	Quantum and Semiclassical Molecular Dynamics of Nanostructures	July
T-10	Hlavacek	BioNetGen: a modeling tool that handles combinatorial complexity	Mathematical Models in Signaling Systems	June
T-10	Hlavacek	Modeling Combinatorial Complexity in Cell Signaling	Mathematical Models in Signaling Systems	June
T-10	Korber	Molecular Mechanisms of HIV Pathogenesis (X7)	HIV Vaccine Development: Progress and Prospects (X8)	April
T-10	Korber	Imprinting of CTL Escape Mutations on the Viral Population in Durban, South Africa	AIDS Vaccine 2004	August
T-10	Korber	Neutralization Antibody Signature Patterns in HIV Sequences	HIV Dynamics and Evolution Conference	April
T-10	Kuiken	Full Length Sequencing of HCV Identifies Novel Regions of the Viral Genome Associated with Response to Antiviral Therapy	11th Symposium on Hepatitis C and Related Viruses	October
T-10	Labute	The royal of functionally distinct conformational substates in Dioxygen Activation by Myoglobin	T-10 Seminar Talk	April
T-10	Labute	The royal of functionally distinct conformational substates in Dioxygen Activation by Myoglobin	CNLS Annual Conference	May
T-10	Leitner	Recombination, 3D Network Structure, Multiple Transmission and Subpopulation Frequency Shifts in a Mother-to-Child Transmission Case	2004 International Bioinformatics Meeting	September
T-10	Leitner	HIV Database Workshop	11th Conference on Retroviruses and Opportunistic Infections	February
T-10	Leitner	Recombination, 3D Network Structure Multiple Transmission and Subpopulation Frequency Shifts in a Mother-to-Child Transmission Care	HIV Dynamics and Evolution	April
T-10	Pearson	Identification and Equivalence of Hidden Markov Models for Single Ion Channel Kinetics Using the Inter-Conductance Rank	State University of New York	August
T-10	Pearson	Identification and Equivalence of Hidden Markov Models for Single Ion Channel Kinetics Using the Inter-Conductance Rank	Mathematics Seminar	October
T-10	Pearson	Identification and Equivalence of Hidden Markov Models for Single Ion Channel Kinetics Using the Inter-Conductance Rank	System Science Seminar	October
T-10	Pearson	Sheet excitability and nonlinear wave propagation	New Jersey Institute of Technology	May

Group	Name	Title	Location	Month (2004)
T-10	Pearson	Sheet excitability and nonlinear wave propagation	University of Connecticut Health Sciences Center Seminar	May
T-10	Pearson	Identification and Equivalence of Hidden Markov Models for Single Ion Channel Kinetics Using the Inter-Conductance Rank	State University of New York	August
T-10	Perelson	Study of Pharmacodynamics of Antiretroviral Agents in HIV-1 Infected Patients Using Viral Dynamic Models With Consideration of Drug Susceptibility and Adherence	Conference on Retroviruses and Opportunistic Infections 2005	February
T-10	Perelson	HIV Decay Rates Do Not Increase . . . Controlled Trial (HIV-NAT 102)	Conference on Retroviruses and Opportunistic Infections 2005	February
T-10	Perelson	Viral Kinetics in Acute SIV/SHIV Infection: Estimation of the Basic Reproductive Ratio (R0)	Conference on Retroviruses and Opportunistic Infections 2005	February
T-10	Perelson	An Overview of Computational and Theoretical Immunology	3rd International Conference on Artificial Immune Systems	September
T-10	Perelson	Modeling Viral Infections	Summer School on Mathematics in Biology and Medicine	September
T-10	Perelson	What We Can Learn By Studying HCV Kinetics?	Hong-Kong-Shanghia International Liver Congress	February
T-10	Perelson	The Population Dynamics of Cytotoxic T Lymphocytes	Computational and Mathematical Population Dynamics Conference	June
T-10	Ribeiro	Impact of Thymectomy on the Peripheral T-Cell Pool . . . Immunodeficiency Virus	Telethon Institute, Perth, Australia and Center for Vaccine Research	Jan05
T-10	Ribeiro	Viral Kinetics in Acute SIV/SHIV Infection: Estimation of the Basic Reproductive Ratio (R0)	12th Conference on Retroviruses and Opportunistic Infections	Feb05
T-10	Ribeiro	Modeling a Thymectomy Experiment to Quantify Production of New T-Cells	Immune Models and Host-Pathogen Dynamics Workshop	May
T-10	Ribeiro	Measuring the Basic Reproductive Ratio (R0) From in Vivo Data	Society of Mathematical Biology Annual Meeting, U. of Michigan	July
T-10	Sanbonmatsu	Structural pathway of tRNA Accommodation into the Ribosome	RNA 2004 Meeting	June
T-10	Sanbonmatsu	Simulating of the 70S ribosome in explicit solvent	Arizona Days	January
T-10	Sanbonmatsu	Towards a movie of the ribosome: a whole ribosome molecular dynamics simulation	Biophysical Society Meeting	February
T-10	Sanbonmatsu	Accommodation of tRNA by the ribosome: all-atom computer simulations	Jaime Doudna Cate Lab UCB	October
T-10	Sanbonmatsu	Accommodation of tRNA by the ribosome: all-atom computer simulations	Harry Noler Lab UCSC	August
T-10	Sanbonmatsu	Multimillion Atom Simulations of the Ribosome: A New State-Of-The-Art in Computational Biology	Super Computing 2004 Conference (IEEE)	November
T-10	Stajic	From ultracold superfluids to high temperature superconductors	Condensed Matter Theory Center	February
T-10	Stajic	The nature of superfluidity in ultracold fermi gases near Feshbach resonances	APS Meeting	March
T-10	Torney	Maximum Algorithms for DSN Swarming	ISRM 2004	April
T-10	Torney	Proliferation Detection Technologies Program Technical Information Exchange	TIE Meeting, LANL	March
T-10	Tung	A SANS Contrast Variation Study to Elucidate Structural . . . Activator Protein Calmodulin	American Conference on Neutron Scattering	June
T-10	Tung	A Knowledge Based Approach for Modeling RNA Loop Structures	49th Annual Meeting, Biophysical Society	Feb05

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-10	Zhang	Evolutionary and Immunological Implications of N-Linked Glycoslation Site in HIV Envelope	AIDS Vaccine 2004 Conference	August
T-11	Abanov	The Spin Resonance and high Frequency Optical Properties of the Cuprates	APS March Meeting	March
T-11	Abanov	The Missing Part of the Hertz-Millis Theory	LANL Workshop	May
T-11	Abanov	Quantum Criticality The fate of Adiabaticity	Texas A&M University Colloquium	December
T-11	Albers	From atom to Engineering: Multiscale Methods for Dispacive Phase Transformations	Texas Tech University	October
T-11	Albers	Pu-A Condensed matter Point of View	Actinide Sci. for the 21st Century	May
T-11	Albers	Mechanical and Thermodynamics properties of Solid Zirconium Using a Tight-Binding approach	APS March Meeting	March
T-11	Batista	Condensation of Triplons in Han Purple Pigment BaCuSi206	Geballe Laboratory for Advanced Materials Stanford University	October
T-11	Batista	Exact Ground States of a Frustrated 2D Magnet: Deconfined Fractional Excitations at a First order quantum Phase Transition	Institute of Theoretical Physics Switzerland	October
T-11	Batista	Electronic Ferroelectricity: A Novel Broken Symmetry State	Dept. of Physics, University of Fribourg	September
T-11	Batista	Exact Ground States of a Frustrated 2D Magnet: Deconfined Fractional Excitations at a First order Quantum Phase Transition	International Workshop on Frustrated Magnetism, New York	September
T-11	Batista	Condensation of Triplons in Han Purple Pigment BaCuSiz06	2nd Asia-Pacific Workshop, Condensed Matter Physics	June
T-11	Boulaevskii	Radiation from Josephson Vortex Flow in Layered Superconductors	Int'l Workshop on Nanomagnetism and Superconductivity, Argonne	November
T-11	Boulaevskii	Radiation from Josephson Vortex Flow in Layered Superconductors	Int'l Conf. Fundamental Problems of High Temperature Superconductivity	October
T-11	Graf	High-pressure Debye-Waller and Grueneisen parameters of AU and CU	AIP Conference	July
T-11	Graf	Strong Electron -Phonon Coupling in Delta Phase Stabilized Pu0.95A10.05	The 59th Calorimetry , Santa Fe, NM	June
T-11	Graf	Glass and Stripe Phases in the Coexistence Region of superconductivity and Antiferromagnetism	D E L F S 04 - Santa Fe, NM	March
T-11	Gubernatis	Interference Mechanism for Itinerant Ferromagnetism	2nd Workshop of Predictive Capabilities for Strongly Correlated Systems - Oak Ridge	November
T-11	Gubernatis	Marshal Rosenbluth and the Metropolis Algorithm	Annual Meeting of the Division of Plasma Physics, Savannah	November
T-11	Gubernatis	Itinerant Ferroelectricity: Some new results for a new phenomena	Recent Advance in Condensed Matter Physics,Hong Kong	June
T-11	Hruska	Effects of a Single Quantum Spin on Josephson Oscillations	XII Int'l Conference on Recent Progress in Many-Body Theories	November
T-11	Hruska	Tunneling Spectroscopy of Magnetic Excitations in Layered Magnetic Superconductors	Int'l Workshop on Nanomagnetism and Superconductivity, Argonne	November
T-11	Lomdahl	Dislocation Structure Behind a Shock Front in FCC Perfect Crystals	TMS - Ron Armstrong Symposium	February
T-11	Martin	Stripes in Superconducting Cuprates Possible Phases and their Diagnostics	International Conference on Dynamical Energy Landscapes, Santa Fe	April

Group	Name	Title	Location	Month (2004)
T-11	Martin	Surprising spin and charge dynamics of single electron traps in field-effect transistors	Clarkson University, New York	May
T-11	Martin	Single electron spin and charge dynamics in a field effect transistor	University of Illinois,Dept. of Physics	November
T-11	Martin	Electrical detection of single electron spin resonance	QUEST Workshop, Santa Fe, NM	August
T-11	Martin	Stripes in Superconducting Cuprates Possible Phases and their Diagnostics	Stripes 2004, Rome, Italy	September
T-11	Martin	Single electron spin measurement in Si MOSFET: experiment and theory	Argonne Theory Conference	November
T-11	Martin	Ground State Cooling of Nanomechanical Resonators	APS March Meeting	March
T-11	Martin	Fluctuations, Dissipation, and Quantum Measurement	Aspen Center for Physics	July
T-11	Mozyrsky	Magnetic Properties of Random Telegraph Noise in Field-Effect Transistors: Single Spin resonance and Kondo Effect	Material Science Colloquium, Cornell University	October
T-11	Mozyrsky	Single spin magnetic resonance and strong correlations in electron traps in field-effect transistors	University of Karlsruhe Colloquium	July
T-11	Mozyrsky	Physics and Applications of Random Telegraph Noise in Field-Effect Transistors	University of New York Physics Colloquium	February
T-11	Ortiz	Seminar	QUEST 2004, Santa Fe, NM	December
T-11	Ortiz	Condensed Matter Colloquium	von Neumann Institute, Juelich, Germany	July
T-11	Ortiz	Theory Seminar	Max Planck Institute, Munich, Germany	July
T-11	Ortiz	Quantum Information Science Seminar	University of Illinois	January
T-11	Ortiz	Condensed Matter Seminar	University of Illinois	January
T-11	Saxena	Mesoscopic Modeling of Microstructure and Magnetoelastic Materials	National Congress on Materials: Symposium on Magnetic Shape Memory Alloys, Cancun, Mexico	August
T-11	Saxena	Elasticity of Membranes and Vesicles: Role of Topology	Workshop on Topological Solitons and their applications in Physics and Biology	August
T-11	Saxena	Textures in a Generalized Ginzburg-Landau Free Energy	APS March Meeting Montreal, Canada	March
T-11	Saxena	Pieoelectric Response of Engineered Domains in Ferroelectrics	APS March Meeting, Montreal, Canada	March
T-11	Saxena	Pieoelectric response Of Domains in Ferroelectrics	National Institute for Materials Science Tsukuba, Japan	December
T-11	Saxena	Intrinsic Inhomogeneity in Multiferroic Materials	National Institute for Materials Science Tsukuba, Japan	December
T-11	Saxena	Landau Theory of Structural Phase Transformations and Long-Range Forces	National Institute for Materials Science Tsukuba, Japan	December
T-11	Saxena	Intrinsic Inhomogeneity, Microstructure and Complex Functional Materials	Dipartimento di Fisica, Universit di Roma, Rome Italy	June
T-11	Saxena	Spintronics: Exploring Spin based Phenomena in Materials	Facultat de Fisica, Universitat de Barcelona, Spain	May
T-11	Saxena	Intrinsic Inhomogeneity, Texturing and Complex Functional Materials	Indian Institute of Technology, Kanpur, India	January
T-11	Schnell	Ab-initio mechanical and thermodynamic properties of solids using the tight-binding approach	University of Bremen, Germany	June
T-11	Schnell	Details of the tight-binding approach	University of Bremen, Germany	June

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-11	Smith	Electron spin Injection from Ferromagnetic Contacts	University of Wisconsin	June
T-11	Smith	Electron spin injection from ferromagnetic Contacts	University of Utah	May
T-11	Smith	Electron Spin Injection from Ferromagnetic Contacts	Ohio State University	April
T-11	Trugman	Dynamics of Quasiparticle Formation	Case Western Reserve University	December
T-11	Trugman	Dynamics of Polaron Formation	Workshop on Colossal Magnetoresistive Manganites	July
T-11	Zhu	Nanoscale electronic structure in high-temperature superconductors	Indiana Purdue University	January
T-11	Zhu	Nanoscale electronic structure in high-temperature superconductors	New York State University	January
T-12	Asthagiri	Quasi-Chemical Theory and the Hydration of Ions in Aqueous Solutions	CECAM workshop on Continuing Challenges in Free Energy Calculations	May
T-12	Asthagiri	Quasi-Chemical Theory and the Hydration of Ions in Aqueous Solutions	UCB, Invited talk at the Department of Chemistry	June
T-12	Asthagiri	Quasi-Chemical Theory and the Hydration of Ions in Aqueous Solutions	Workshop on Quantum and Semiclassical Molecular Dynamics of Nanostructures, CNLS, LANL	July
T-12	Asthagiri	A Fresh Attack on the Statistical Thermodynamics of Molecular Liquids	Workshop on Quantum and Semiclassical Molecular Dynamics of Nanostructures, CNLS, LANL	July
T-12	Asthagiri	Quasi-Chemical Theory and Hydrophyllic Hydration	John Hopkins University, Seminar for the Department of Chemical and Bimolecular Engineering	August
T-12	Asthagiri	Hydration of Biomolecular Specific Aqueous Dictation: Insights from Quasi-Chemical Theory	American Institute of Chemical Engineers Annual Meeting	November
T-12	Babikov	Quantum Origin of Anomalous Isotope Effect in Ozone Formation	Invited lecture in the University of Central Florida	April
T-12	Babikov	Anomalous Isotope Effect in Ozone Formation: Discovery, Hypotheses, Explanation	Fall Meeting of the American Chemical Society	August
T-12	Batista	Excited State Calculations of the States Involved in the Luminescent Probe [Ru(bpy)2dppz]2+	ACS PRF Summer School: TD-DFT and Dynamics of Complex Systems	June
T-12	Batista	Excited State Calculations of the States Involved in the Luminescent Probe [Ru(bpy)2dppz]2+	ACS Annual March Meeting	March
T-12	Batista	Calculations of Thermochemistry and Molecular Properties of UFn and UCln using DFT	ACS Annual March Meeting	March
T-12	Challacombe	Linear Scaling Electronic Structure Theory: From Density Matrices to Response Functions	44th Sanibel Symposium	February
T-12	Challacombe	Linear Scaling Electronic Structure Theory: From Density Matrices to Response Functions	James Frank Institute, University of Chicago	January
T-12	Chao	A Coarse-Grained Rigid Blob Model: Toward Mesoscopic Simulations	24th CNLS Annual Conference	May
T-12	Chao	Coarse-Grained Rigid Model: Toward Multiscale Molecular Simulations	Molecular Modeling of Macromolecules, ACS Conference	March
T-12	Clark	Wave Function Analysis for the Elicidation of Actinide Electronic Structure	Washington State University Departmental Seminar	November

Group	Name	Title	Location	Month (2004)
T-12	Clark	New Approaches to the Analysis of Bonding in Simple Actinide Complexes using Density Functional Theory	227th ACS National Meeting	March
T-12	Clark	Unusual Excited State Electronic Structure of (Cp)2Th(NCph)2: Not LMCT After All	227th ACS National Meeting	March
T-12	Goupalov	Spectral Weight of Zero Phonon Line in Linear Absorption Spectra of Semiconductor Quantum Dots	International Meeting on Fundamental Optical Processes in Semiconductors	August
T-12	Hanson	Micro-mechanical modeling of PBX 9501 Binder	Energetic Materials Review	November
T-12	Hanson	A Micromechanical Model for Estane to Relate Chemical Degradation to Extreme STS Requirements	Enhanced Surveillance Campaign Annual Review	March
T-12	Hanson	A Micromechanical model for filled polymers	Enhanced Surveillance Campaign Annual Review	March
T-12	Henkelman	Methods for simulating long time scales in atomic systems	APS March Meeting	March
T-12	Holian	Energy exchange between mesoparticles and their internal degrees of freedom	CECAM Workshop	May
T-12	Holian	Energy exchange between mesoparticles and their internal degrees of freedom	Computational Modeling and Simulations of Materials	June
T-12	Kendrick	Quantum Hydrodynamics: Application to N-dimensional Reactive Scattering	CNLS workshop Quantum and Semiclassical Molecular Dynamics of Nanostructures	July
T-12	Koslowski	Dislocation Patterns and the Deformation of Metals	TMS Annual Meeting	October
T-12	Koslowski	Avalanches and Scaling in Creep Phenomena	Multiscale Modeling of Materials	October
T-12	Koslowski	Micromechanical Modeling for Thermo-Mechanical Reliability in Interconnects	MRS Fall Meeting	November
T-12	Koslowski	Material Length Scales in Plastic Flow	MRS Fall Meeting	November
T-12	Koslowski	Dislocation Patterning and Scaling in Plastic Deformation	LANL Materials Theory Seminar	October
T-12	Koslowski	Microstructure and Macroscopic Response of Single Crystals under External Loading	CalTech Mechanical Engineering Seminar	October
T-12	Koslowski	Dislocation Patterning and Avalanches in Plastic Deformation	MIT Dept. of Mech. Eng. & Dept. of Mat. Sci. and Eng. Seminar	November
T-12	Kress	Matter in Extreme Environments	X-2 Seminar Series, LANL	June
T-12	Kress	Aging and Free-Radical Oxidation of PBX-9501	34th Annual PolyMAC Symposium	June
T-12	Kress	Matter in Extreme Environments	X-4 Seminar Series, LANL	April
T-12	Kress	Simulations of Ultracold Plasmas and Rydberg Gasses	At the Frontier of Cold Rydberg Gasses and Ultracold Plasmas, International Workshop	March
T-12	Kress	Quantum Molecular Dynamics Simulations of Warm Dense Plasmas	14th APS Topical Conference on Atomic Processes in Plasmas	April
T-12	Kress	Coarse-Grained Rigid Blob Model for Macromolecule Simulation	Conference on Statistical Physics of Macromolecules	May
T-12	Lesar	An Analytic Model of Bone Remodeling	2nd International Workshop on Multiscale Modeling	October
T-12	Lesar	Mesoscale Modeling of Dislocation Energetics and Dynamics	2nd International Workshop in Multiscale Modeling	October
T-12	Lesar	Coarse-Grained Energetics and Dynamics of Dislocations: Towards a Density Functional Theory of Dislocations	2nd International Workshop on Multiscale Modeling	October

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-12	Lesar	Mesoscale Modeling of Dislocation Energetics and Dynamics	Workshop in Linking Processing to Performance through Microstructure II	May
T-12	Lesar	Computational Modeling of Materials: Metals to Biomaterials	UCLA Department of Materials Science and Eng. Invited Seminar	February
T-12	Lesar	Computational Modeling of Materials	Invited Seminar, University of Michigan	January
T-12	Lesar	Discrete and Coarse-Grained Dislocation Structure and Dynamics	Materials and Manufacturing Directorate, Air Force Research Lab	January
T-12	Magyar	A Computational Study of the Optical Properties of Phenylacetylenes	APS March Meeting	March
T-12	Magyar	Density functional theory in one-dimension for contact-interacting fermions	DFT Summer School and Int'l Many-Body Theory Conference	June
T-12	Martin	Hybrid DFT	Workshop on Strongly Correlated Electrons, Oak Ridge, TN	April
T-12	Masunov	Density Functional Theory studies of the ground and excited states of advanced materials	Seminar given at South Dakota School of Mines and Technology	December
T-12	Masunov	Density Functional Theory studies of the ground and excited states of advanced materials	Seminar at Argonne	April
T-12	Masunov	Density Functional Theory studies of the ground and excited states of advanced materials	Seminar at New Mexico School of Mines and Technology	April
T-12	Nemeth	Internal Coordinate Geometry Optimization and Linear Scaling Ab-Initio Theory for Quantum Biochemistry	3rd International Conference Computational Modeling and Simulation of Materials	May
T-12	Pack	Hydrolysis of Estane 5703 in PBX 9501	High explosives working group meeting, LANL	September
T-12	Pack	Symmetry-induced Isotope Effects in Recombination Kinetics	LANL, T-12 Seminar	April
T-12	Pack	Curious Effects in Recombination Kinetics	Gordon Conference on Atomic and Molecular Interactions	July
T-12	Peery	Ab Initio Molecular Dynamics Study of Salt Clathrate Hydrates	Water & Aqueous Solutions, Gordon Conference	August
T-12	Piryatinski	Three-pulse photon-echo spectroscopy as a probe . . . electron -phonon systems	51st Annual Western Spectroscopy Association Conference	January
T-12	Piryatinski	Nonlinear Spectroscopy of Photoexcited Dynamics in Materials with Strong Electron-phonon Coupling	CNLS 24th Annual Conference: Statistical Physics of Macromolecules	May
T-12	Piryatinski	Three-pulse photon-echo spectroscopy as a probe of photoexcited electronic state manifold in coupled electron-phonon systems	Gordon Research Conference: Electronic Processes in Organic Materials	July
T-12	Pratt	Back to the Future of Hydrophobic Effects and Molecular Bioscience	Stanford Computational and Mathematical Engineering Departmental Seminar	November
T-12	Pratt	Hydrophobic Interaction	Gordon Research Conference "Water & Aqueous Solutions"	August
T-12	Pratt	Quasi-Chemical Theory and the Hydration of Ions in Aqueous Solutions	UCB Department of Chemistry Seminar	June
T-12	Pratt	The Potential Distribution Theorem in Modeling of Molecular Solutions	CECAM Workshop Continuing Challenges in Free Energy Calculations	May
T-12	Pratt	A Fresh Attack on the Molecular Theory of Liquids	Institute for Complex Adaptive Materials Dynamic Energy Landscapes and Functional Systems Workshop	April

Group	Name	Title	Location	Month (2004)
T-12	Pratt	A Fresh Attack on the Molecular Theory of Liquids	University of Cincinnati Department of Chemistry Seminar	March
T-12	Redondo	Simple models of phospholipid fluid membranes	UNM Seminar	October
T-12	Redondo	How We Do Science	LANL Seminar	August
T-12	Redondo	Coarse-grained models for nano- and mesoscale soft matter systems	Seminar at Nanotechnology Center, University of Illinois	June
T-12	Redondo	Coarse-grained models for nano- and mesoscale soft matter systems	Frontiers in Materials Research Conference	April
T-12	Redondo	Coarse-grained model for polymers and soft matter	DELFS Conference	April
T-12	Redondo	Modeling and Simulation of Materials	San Diego State Seminar	March
T-12	Redondo	Bone remodeling and resorption	Pfizer Pharmaceuticals, LANL	March
T-12	Redondo	Materials Modeling and Simulation	3M Visit to LANL	March
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	APS March Meeting	March
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	University of Maryland Applied Dynamics Seminar	November
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	Rutgers University Condensed Matter Physics Seminar	November
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	Syracuse University Physics Colloquium	November
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	University of Central Florida Condensed Matter Physics Seminar	October
T-12	Reichhardt	Do Vortices Entangle?	University of Florida Condensed Matter Physics Seminar	October
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	Clark University Physics Colloquium	October
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	University of Wisconsin at Madison, RG Herb Materials Physics Seminar	September
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	University of Iowa, Condensed Matter Physics Seminar	September
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	Iowa State University, Condensed Matter Physics Seminar	September
T-12	Reichhardt	Computer Simulations of Glassy Disordered Media	Los Alamos Women in Science Lunch Talk	July
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	CNLS Seminar, LANL	June
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	University of Michigan Condensed Matter Physics Seminar	May
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	University of Chicago Materials Research Center Seminar	May
T-12	Reichhardt	Multiscaling at Point J: Jamming is a Critical Phenomenon	UCLA Advances in Soft Matter Seminar	April
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	UCSD Condensed Matter Physics Seminar	April
T-12	Reichhardt	Ratchet Cellular Automata	CNLS Seminar, LANL	April

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	University of Arizona Physics Colloquium	February
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	Condensed Matter Physics Seminar, Ohio State University	January
T-12	Reichhardt	Fibrillar Templates and Soft Phases in Systems with Short-Range Dipolar and Long-Range Interactions	T-12 Brown Bag Seminar, LANL	January
T-12	Tretiak	Nonlinear optical response of organic electronic materials	Binational Consortium of Optics, Winter School	January
T-12	Tretiak	Semiempirical Methods for Modeling of Photoexcited Dynamics in Organic Electronic Materials	ACS National Meeting	March
T-12	Tretiak	Excited States and Nonlinear Optical Response of Organic Electronic Materials	Department of Chemistry, University of California	April
T-12	Tretiak	Excited States and Nonlinear Optical Response of Organic Electronic Materials	Department of Chemistry, University of Southern California	May
T-12	Tretiak	Nonlinear and Nonadiabatic Dynamics in Coupled Electron-Phonon Systems	Telluride Conference on Nonadiabatic Dynamics	August
T-12	Voter	Accelerated Molecular Dynamics Methods	Workshop at Institute Henri Poincare, Invited Seminar	December
T-12	Voter	Kinetic Monte Carlo	NATO School on Radiation Effects in Solids, lecturer	July
T-12	Voter	Accelerated Molecular Dynamics Methods	NATO School on Radiation Effects in Solids, lecturer	July
T-12	Voter	Accelerated Molecular Dynamics Methods	Sandia National Laboratory, Invited Seminar	July
T-12	Voter	Accelerated Molecular Dynamics Methods	SIAM Conf. on Mathematical Aspects of Materials Science	May
T-12	Voter	Accelerated Molecular Dynamics Methods	Pennsylvania State, Invited Seminar	April
T-12	Voter	Accelerated Molecular Dynamics Methods	NSF/EC Workshop in Methods in Computational Materials Science, invited speaker	April
T-12	Voter	Accelerated Molecular Dynamics Methods	CalTech Invited Seminar	March
T-12	Voter	Atomistic Simulation Methods	Int'l Workshop in Advanced Computational Materials Science	March
T-12	Voter	Accelerated Molecular Dynamics Methods	MIT Department of Mechanical Engineering, Invited Seminar	March
T-12	Voter	Accelerated Molecular Dynamics Methods	Livermore, Invited Talk	January
T-12	Walker	Spectral Library Clustering	DOE Technical Information Exchange Meeting, LANL	March
T-13	Ben-Naim	Granular Gases	SIAM Materials	May
T-13	Ben-Naim	Opinion Dynamics	Dynamics Days	January
T-13	Berman	Self-Assembled Quantum Computation	Quantum Computing Program Review	August
T-13	Berman	Perturbation Theory for Quantum Computation	Naval Research Laboratory	June
T-13	Berman	Modeling of Nano-Devices	Workshop: The CINT Theory, Modeling and Simulation	May
T-13	Chung	Radiation Induced Interaction of Optical Solitons in Random Media	AIMS 5th International Conference on Dynamical systems & Differential Equations	June
T-13	Doolen	LANL Research Projects	DHS Student Intern Workshop	November

Group	Name	Title	Location	Month (2004)
T-13	Doolen	Smuggled Nuclear Weapons	DHS Workshop on Smuggled Nuclear Weapons	May
T-13	Hastings	Exact Multifractal Spectrum for Laplacian Random Walks	ICTP	July
T-13	Hastings	Mean-Field and Anomalous Behavior on a Small-World Network	MIT	February
T-13	Hastings	Lieb-Schultz-Mattis in Higher Dimensions	Brown University	October
T-13	Hastings	Lieb-Schultz-Mattis in higher Dimensions	Princeton University	October
T-13	Hastings	Lieb-Schultz-Mattis in Higher Dimensions	University of California, Davis	May
T-13	Hastings	Lieb-Schultz-Mattis in Higher Dimensions	University of Arizona	February
T-13	Jarzynski	Nonequilibrium Thermodynamics of a Single Biomolecule	Woodward Lecture Series in the Chemical Sciences (Harvard-MIT)	October
T-13	Jarzynski	Nonequilibrium Work Theorems for Systems Strongly Coupled to Thermal Environments	ESI Workshop on Stochastic and Deterministic Dynamics	August
T-13	Jarzynski	Equalities and Inequalities for Transitions Between Nonequilibrium Steady States	Workshop on Quantum Dissipation	May
T-13	Jarzynski	Thermodynamics of a Single Biomolecule	Sanibel Symposium, Biophysics Session	March
T-13	Jarzynski	Targeted-Ensemble Free Energy Methods	CECAM Meeting on Continuing Challenges in Free Energy Calculations	May
T-13	Jarzynski	Classical and Quantal Foundations of Far-From Equilibrium Work Identities	Winter Colloquium on the Physics of Quantum Electronics	January
T-13	Kamenev	Quantum Logic Operations and Creation of Entanglement . . . Interaction Between Qubits	Quantum Computing Program Review 2004	August
T-13	Kamenev	Quantum Logic Operations and Creation of Entanglement . . . Interaction Between Qubits	Third LANL Quantum Workshop	December
T-13	Kamenev	Dynamics of a Scalable Ising Spin . . . Quantum Logic Gates	Arizona Days	January
T-13	Plohr	Conservative Formulations for Numerical Simulation in Solid Mechanics	Computational Physics Advisory Council	March
T-13	Stepanov	Instanton Method of Post-Error-Correction Analytical Evaluation	IEEE Information Theory Workshop	October
T-13	Toroczkai	Gradient Networks: From Transport Efficiency in Scale-Free Graphs to Social Influence Structures	The University of Arizona	March
T-13	Toroczkai	Gradient Networks	UCSD	May
T-13	Toroczkai	Agent-Based Physics	Eotvos University	July
T-13	Toroczkai	Gradient Networks: From Transport Efficiency in Scale-Free Graphs to Social Influence Structures	Computational and Applied Mathematics Seminar	September
T-13	Toroczkai	Exploring the Fabric of Contact Networks for Monitoring and Mitigating Smallpox Epidemics: An Agent-Based Approach to Decision Making	Complex Systems	October
T-13	Toroczkai	Gradient Networks	Renssellaer Polytechnic Institute	October
T-13	Toroczkai	Influence Networks	Boston University	October
T-13	Toroczkai	Gradient Networks: From Transport Efficiency in Scale-Free Graphs to Social Influence Structure	Condensed Matter Seminar	November
T-14	Bardenhagen	3D Simulations of the Dynamic Compaction of Granular Material & PBXs	TINC Meeting	June

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-14	Bardenhagen	MPM Calculations on Realistic Microstructures	LANL Energetic Materials Review	October
T-14	Bardenhagen	Numerical Simulation of the Full Densification of Foams	Mechanical Engineering Dept., U. of Washington	October
T-14	Bardenhagen	Numerical Simulation of Real Foams with PIC	Mechanical Engineering Dept., U. of Washington	November
T-14	Bardenhagen	Simulation of Large Granular Shear	35th Annual Conference of ICT, Workshop on Friction, Germany	June
T-14	Bardenhagen	Numerical Simulation of Full Densification of Foams	5th European Conf. on Foams, Emulsions & Applications, France	July
T-14	Brydon	Numerical Simulation of Real Foams with PC	Mechanical Eng. Dept., University of Washington, Seattle, WA	November
T-14	Brydon	MPM Calculations on Realistic Microstructures	2004 LANL Energetic Materials Review	November
T-14	Brydon	Numerical Simulation of the Full Densification of Foams	Mechanical Eng. Dept., University of Washington, Seattle, WA	November
T-14	Brydon	3D Simulations of the Dynamic Compaction of Granular Material and PBXs	Annual Conference of ICT, Energetic Materials - Structure and Properties	June
T-14	Chitanvis	Obtaining the Ginzburg-Landau Free Energy From Molecular Dynamics	Statistical Physics of Macromolecules, CNLS	April
T-14	Chitanvis	Nexus between Reactive MD Simulations and Continuum Reactive Burn Models	2004 LANL Energetic Materials Review	November
T-14	Dienes	Joing DOD/DOE Munitions Technology Development Program	TCG-1 Review Meting, Redstone Arsenal	July
T-14	Heim	Molecular Dynamics Models of High Explosives	2004 LANL Energetic Materials Review	November
T-14	Jaramillo	High-Explosive Properties from Classical Molecular Dynamics Simulations and Quantum-Chemical Computations	35th International ICT-Conference, Karlsruhe, Germany	June
T-14	Jaramillo	Atomistic Simulations of Liquid HMX	Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Jaramillo	Progress Toward Understanding Bicrystal Stress Wave Inhomogeneity	Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Kadau	Turbulence in Rayleigh-Taylor Instabilities and Pipe Flows with DSMC-CBA	Visit at LLNL, Livermore, CA	October
T-14	Kadau	Solitons and Condensed Matter Physics	Visit at UCSD, La Jolla, CA	April
T-14	Kadau	Simulation of Structural Transformations in Nanoparticles	3rd International Conference on Computational Modeling, Sicily	June
T-14	Kober	Issues and Directions for Modeling Energetic Materials	ASCI PI Meeting, Las Vegas, NV	March
T-14	Kober	Materials Aging Model	LANL Enhanced Surveillance Annual Review, Los Alamos	March
T-14	Kober	Progress Toward Understanding Bicrystal Stress Wave Inhomogeneity	Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Kober	Models of Estane and Other Polymers	LANL Energetic Materials Review	October
T-14	Kober	Viscoelastic Flows of Block Copolymers	LANL Energetic Materials Review	August
T-14	Kober	Molecular Dynamics Models of High Explosives	LANL Energetic Materials Review	October
T-14	Kober	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	LANL Energetic Materials Review	October
T-14	Menikoff	Analysis of Wave Profiles for Single Crystal HMX	LANL Energetic Materials Review	August
T-14	Sewell	Obtaining the Ginzburg-Landau Free Energy From Molecular Dynamics	Statistical Physics of Macromolecules, CNLS	May

Group	Name	Title	Location	Month (2004)
T-14	Sewell	Obtaining the Ginzburg-Landau Free Energy from Molecular Dynamics	Statistical Physics of Macromolecules, CNLS	May
T-14	Sewell	Adventure in, and Issues with, Validation of Atomistics Simulations of High Explosives and Other Organic Materials	2004 CECAM Workshop on Materials Under Extreme Conditions... , Lyon, France	May
T-14	Sewell	Obtaining the Ginzburg-Landau Free Energy From Molecular Dynamics	Statistical Physics of Macromolecules, CNLS	May
T-14	Sewell	High-Explosive Properties from Classical Molecular Dynamics Simulations and Quantum-Chemical Computatation	35th International ICT-Conference, Karlsruhe, Germany	May
T-14	Sewell	Aspects of HE Theory, Simulation and Modeling at LANL	ASC/ASAP-Tri Lab Support Team Meeting, Salt Lake City, UT	April
T-14	Sewell	Present and Emerging Capabilities of Atomistic Simulation in Condensed Phase High Explosive	Workshop: Shear Stress Evaluation & Its Contributions to the Ignition of PBXs, Karlsrhue, Germany	June
T-14	Sewell	All-Electron Density-Functional Studies of Hydrostatic Compression of PETN and Beta-HMX	2004 Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Sewell	Progress Toward Understanding Bicrystal Stress Wave Inhomogeneity	Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Sewell	High-Explosive Properties from Classical Molecular Dynamics Simulations and Quantum Chemical Computations	35th Annual Conference of the ICT, Fraunhofer Institute, Karlsrhue, Germany	June
T-14	Sewell	Atomistic Calculations of High-Explosive Properties	Int'l Conf. New Models and Hydrocodes for Shock Wave Processes, College Park, MD	May
T-14	Shaw	Detonation Products EOS Theory	2004 LANL Energetic Materials Review	November
T-14	Strachan	High-Explosive Properties from Classical Molecular Dynamics Simulations and Quantum-Chemical Computations	35th International Annual Conference of ICT, Karksruhe, Germany	June
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	MMM-2 Talk, UCLA	September
T-14	Strachan	MGO:AB Initio Equation of State and Its Dislocation Properties from Molecular Dynamics Simulations	AGU 2004 Fall Meeting, San Francisco, CA	August
T-14	Strachan	Anisotropic Plasticity in NiAL Alloy Under Dynamical Loading	American Physical Society March Meeting, Los Angeles, CA	February
T-14	Strachan	First Principles-Based Multiscale Modeling of Ferroelectric Polymers	3rd International Conference, Computational Modeling & Simulation of Materials, Sicily, Italy	May
T-14	Strachan	High-Explosive Properties from Classical Molecular Dynamics Simulations and Quantum Chemical Computations	35th International ICT-Conference, Karlsruhe, Germany	June
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	Gordon Research Conference on Energetic Materials, Tilton, NH	June
T-14	Strachan	First Principles-Based Modeling of Ferroelectric Polymers: Computational Design of a PVDF-Based Nano-Actuator	Materials Research Society Spring Meeting, Boston, MA	November
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	Gordon Research Conference on Energetic Materials, Titlon, NH	June
T-14	Strachan	Energetic Materials with High I_{sp}: Atomistic Modeling	The PROM (DARPA Project) Kick-off Presentation, Caltech, Los Angeles, CA	July

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-14	Strachan	Multiscale Modeling of Ferroelectric Ceramics for Microwave Applications	The PROM (DARPA Project) Kick-off Presentation, Caltech, Los Angeles, CA	July
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes: Towards Computational Materials Design	MMM-2, UCLA, Los Alamos	October
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	ASC Review Meeting, Caltech, Pasadena, CA	July
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Molecular Crystals	2nd International Conference on Multiscale Materials Modeling, UCLA, Los Angeles, CA	September
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Properties: Towards Computational Materials	Caltech, Pasadena, CA	October
T-14	Strachan	Thermal Decomposition of Nitromethane From Molecular Dynamics	Caltech-ASC Preview Meeting, Caltech, Pasadena, CA	October
T-14	Strachan	Atomistic and Mesoscale Modeling of Mechanical and Chemical Processes in Energetic Materials	2004 LANL Energetic Materials Review	November
T-14	Strachan	First Principles-Based Multiscale Modeling of Ferroelectric Polymers	3rd Int'l Conf. of Comp. Modeling and Simulations of Materials	May
T-14	Strachan	Multiscale Modeling of Nano-Structured Complexity in Ferroelectric Polymers	3rd Int'l Conf. of Comp. Modeling and Simulations of Materials	May
T-14	Tymczak	Numerical Algorithms for Linear Scaling Quantum Chemistry	11th International Congress on Computational and Appl.	July
T-14	Tymczak	Detonation Products EOS Theory	2004 LANL Energetic Materials Review	October
T-14	Tymczak	Linear Scaling Ab Initio Molecular Dynamics	COST - ENSCP, Paris, France	October
T-14	Welch	Obtaining The Ginzburg-Landau Free Energy From Molecular Dynamics	Statistical Physics of Macromolecules,CNLS	May
T-15	Chacon	A fully implicit 3D MHD Newton-Krylov algorithm: a numerical proof-of-principle	2004 International Sherwood Fusion Theory Meeting	April
T-15	Chacon	PIXIE3D: A Parallel, Implicit, Extended MHD 3D Code	46th Annual Mtg. of the Division of Plasma Physics of the APS	November
T-15	Chacon	On Preconditioning fully implicit Newton-Krylov algorithms for extended MHD	2004 SIAM Annual Meeting	July
T-15	Chacon	A Fully Implicit 3D MHD Newton-Krylov Algorithm: A Numerical Proof-of-Principle	International Sherwood Theory Conference	April
T-15	Daligault	Investigation of Ion Dynamics in Liquid Metals Through the Electron-Electron Dynamic Structure Factor	12th International Conference on Liquid and Amorphous Metals	November
T-15	Daligault	Variational Equation of State Model For Dense, High Energy Density Matter	APS Conference/DPP 04 Meeting	November
T-15	Daligault	Impact of Impurity Sedimentation on Cooling of White Dwarfs	APS Conference/DPP 04 Meeting	November
T-15	Daligault	Molecular Dynamics Studies of Neon Diffusion in Carbon-Oxygen White Dwarfs	5th Int'l Conf. on High-Energy Density Laboratory Astrophysics	March
T-15	Finn	Control of resistive wall modes in a cylindrical tokomak with radial and polidial magnetic field sensors	Workshop, Control of MHD Stability: back to the Basics	November
T-15	Finn	3D MHD simulations of large-scale structures of magnetic jets	46th Annual Conference of the Plasma Physics Division of APS	November
T-15	Finn	Magnetic and electrical helical drive for RFPs	46th Annual Conference of the Plasma Physics Division of APS	November

Group	Name	Title	Location	Month (2004)
T-15	Finn	Noise stabilization: markov analysis, circuits, and broken symmetrics	46th Annual Conference of the Plasma Physics Division of APS	November
T-15	Finn	Ideal and resistive plasma resistive wall modes and control: linear and nonlinear	46th Annual Conference of the Plasma Physics Division of APS	November
T-15	Finn	Issues related to MHD equilibrium reconstruction	46th Annual Conference of the Plasma Physics Division of APS	November
T-15	Finn	Control of resistive wall modes in a cylindrical tokamak with radial and poloidal magnetic field sensors	Workshop on Control of MHD Stability: back to Basics	November
T-15	Finn	Noise stabilization in nonlinear circuits	8th Experimental Chaos Conf.	June
T-15	Finn	Noise Stabilized random attractor	Seminar to Nonlinear Dynamics Group	June
T-15	Finn	Single Helicity and Quasi-Single Helicity States in a Reversed Field Pinches	Sherwood Theory Meeting	Apr03
T-15	Finn	Issues Related to MHD Equilibrium Reconstruction	Abstract for American Physical Society Division of Plasma Physics	November
T-15	Finn	Noise Stabilization: Markov Analysis, Circuits, and Broken Symmetries	APS Conference/DPP 04 Meeting	November
T-15	Finn	Ideal and Resistive Plasma Resistive Wall Modes and Control: Linear and Non-Linear	Abstract for American Physical Society Division of Plasma Physics	November
T-15	Finn	Magnetic and Electric Helical Drive for RFPS	APS Conference/DPP 04 Meeting	November
T-15	Glasser	Ion heating in a large aspect ratio FRC by rotating magnetic fields	2004 APS/DPP Conference	November
T-15	Glasser	Spectral Element Model of Extended MHD Plasma Phenomena	2004 APS/DPP Conference	November
T-15	Glasser	Lumped Parameter Model for Feedback Studies in Tokamaks	2004 APS/DPP Conference	November
T-15	Glasser	Adaptive Grid Generation for Magnetically Confined Plasmas	2004 APS/DPP Conference	November
T-15	Glasser	Computation of Singular MHD Instabilities with DCON	2004 Sherwood Fusion Theory Conference	April
T-15	Glasser	Application of the SEL Code to Edge Plasma Modeling	2004 Sherwood Fusion Theory Conference	April
T-15	Glasser	Computation of Singular MHD Instabilities with DCon	2004 Sherwood Fusion Theory Conference	April
T-15	Glasser	Adaptive Grid Generation for Magnetically Confined Plasmas	APS Conference/DPP 04 Meeting	November
T-15	Jones	Inclusion of Atomic/Molecular Physics in the Molecular Dynamics Simulation of Warm Dense Matter	APS Division of Plasma Physics Meeting	November
T-15	Jones	MHD Equilibrium Reconstruction from Correlated Experimental	APS Division of Plasma Physics Meeting	November
T-15	Jones	Determination of Plasma Equilibria in the Presence of Noise	Sherwood Fusion Theory Conference	April
T-15	Jones	Closures of the Vlasov-Poisson System	Sherwood Fusion Theory Conference	April
T-15	Lapenta	A Mechanism for the Attraction of Dust Particles in a Plasma	2004 Capri Dusty Workshop	June
T-15	Lapenta	Jeans Collapse of a System of Electron Emitting Dust Particles	Annual APS April Meeting	May
T-15	Lapenta	Role of the Lower Hybrid Drift Instability on the Onset of Magnetic Reconnection	Annual APS April Meeting	May
T-15	Lapenta	Study of Magnetic Bubble Expansion in Galaxy Clusters	Annual APS April Meeting	May

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-15	Lapenta	A comparison of observations and simulations for the extragalactic jet from the AGN in 3C303	Annual APS April Meeting	April
T-15	Lapenta	Study of the Formation of the Slow Solar Wind	Annual APS April Meeting	May
T-15	Lapenta	The onset of magnetic reconnection	Second Workshop on Thin Current Sheets	April
T-15	Lapenta	Multiscale Kinetic Simulation with the Implicit Moment Method	Conference on Sun-Earth Connections; Mutiscale Coupling in Sun-Earth Processes	February
T-15	Lapenta	Electrostatic Potential Around a Thermioncally Emitting Dust Particles	IV Congresso Italiano di Fisica del Plasma	January
T-15	Lapenta	Current Aligned Instabilities and the Rapid Onset of Magnetic Reconnection	Europe Geosciences Union, 1st General Assembly	April
T-15	Lapenta	3D MHD Simulations of Large-Scale Structures of Magnetic Jets	Annual Meeting APS Division of Plasma Physics, Miniconference on Astrophysical Jets	November
T-15	Lapenta	Simulation of Charging and Shielding of Dust Particles in a Plasma	2004 Capri Dusty Plasma Workshop	June
T-15	Lapenta	3D Reconnection: Onset and Topology	International Sherwood Theory Conference	April
T-15	Lapenta	Implicit Simulation of Kinetic Plasma Physics Problems	Seminar at Brown University	March
T-15	Lapenta	Kinetic Simulation of Dusty Plasmas	2004 Capri Workshop on Dusty Plasmas	June
T-15	Lapenta	Simulations Study of Rapid Onset of Magnetic Reconnection	Division of Plasma Physics Meeting	November
T-15	Lapenta	Theory and Simulation of the Shielding of Emitting Dust Particles	Division of Plasma Physics Meeting	November
T-15	Lapenta	A Comparison of Observations and Simulations in the Jets of the Radio Galaxies 3C303 and 3C274 (Messier 87)	Division of Plasma Physics Meeting	November
T-15	Lapenta	3D Magnetic Reconnection: Evolution of X-Lines and X-Points	Division of Plasma Physics Meeting	November
T-15	Lapenta	Collective Behavior of a System of Emitting Dust Particles	Division of Plasma Physics Meeting	November
T-15	Lapenta	Kinetic Simulations of Magnetic Reconnection in Plasma with Different Beta Values	Division of Plasma Physics Meeting	November
T-15	Lapenta	ASCI Hydrocomponents Miniproject Error Estimator	ASCI Hydrocomponents Miniproject Error Estimator	October
T-15	Lapenta	Particle in Cell Simulation of Combustion Synthesis of TIC Nanoparticles	16th Annual Rio Grande Symposium on Advanced Mat.	October
T-15	Lapenta	High Performances on Simulation of Developmental Biology on a Hybrid Grid	LACSI Symposium	October
T-15	Lapenta	Kinetic Simulations of Magnetic Reconnection in Plasma with Different Beta Values	American Geophysical Union Fall Meeting	December
T-15	Lapenta	Simulation Study of Rapid Onset of Magnetic Reconnection	American Geophysical Union Meeting	December
T-15	Lapenta	3D Magnetic Reconnection: Evolution of X-Lines	American Geophysical Union Fall Meeting	December
T-15	Lapenta	3D MHD Simulation and the Role of Null Points in Coronal Reconnection	American Geophysical Union Fall Meeting	December
T-15	Lapenta	Design and Development of High Performances Parallel Particle in Cell (PIC)	Los Alamos Computer Science Institute Meeting	October

Group	Name	Title	Location	Month (2004)
T-15	Lapenta	Collective Behavior of a System of Emitting Dust Particles	American Geophysical Union Fall Meeting	December
T-15	Lukin	Spectral Element Modeling of Extended MHD Plasma Phenomena	APS Conference/DPP 04 Meeting	November
T-15	Murillo	Conformational Variability in the Protein Kinase A Phosphoryl Transfer	48th Annual Meeting of the Biophysical Society	February
T-15	Murillo	Inclusion of Atomic/Molecular Physics in the Molecular Dynamics Simulation of Warm Dense Matter	APS Conference/DPP 04 Meeting	November
T-15	Nebel	Experimental and Theoretical Studies of Electrostatic Confinement	2004 International Sherwood Fusion and Energy Conference	April
T-15	Nebel	An Electrostatic Confinement Experiment to Explore the Periodically Oscillating Plasma Sphere	TOFE Meeting	September
T-15	Simakov	Application of the Spectral Element Code (SEL) to Edge Plasma Modeling	International Sherwood Fusion Theory Conference	Apr03
T-15	Simakov	Development of the SEL Code and Its Application to the Magnetic Reconnection Problem	International Sherwood Fusion Theory Conference	April
T-15	Simakov	An Ion Drift Kinetic Equation to the Second Order in the Gyroradius Expansion	APS Conference/DPP 04 Meeting	November
T-15	Tang	Force-free magnetic relaxation in driven plasma	APS/DPP 2004	November
T-15	Tang	A laboratory helicity injection perspective of plasma jet formation by a conducting Keplerian accretion disk	2004 American Physical Society Division of Plasma Physics	November
T-15	Tang	Chandresekhar Equiliberia of Compact Toroids with Alfvenic Flows	Sherwood Fusion Energy Conference	April
T-15	Tang	Astrophysical Magnetic Helicity Injection: Jets, Lobes, and LAPD-U	International Sherwood Theory Conference	April
T-15	Tang	MHD Jet and Outflow Driven by an Accretion Disk	Bangg Conference on Cores, Disks, and Outflows in Low and High Mass Star	July
T-15	Tang	A Laboratory Helicity Injection Perspective of Plasma Jet Formation By A Conducting Keplerian Accretion Disk	APS Conference/DPP 04 Meeting	November
T-15	Tang	Force-Free Magnetic Relaxation in Driven Plasmas	APS Conference/DPP 04 Meeting	November
T-15	Tang	Force-Free Magnetic Relaxation in a Driven Compact Toroid	US-Japan Exchange 2004	September
T-15	Tang	Magnetic relaxation of driven plasmas	Center for Integrated Plasma Studies Weekly Seminar	November
T-15	Tang	Force-free magnetic relaxation in a driven compact toroid	US-Japan Exchange 2004 on New Directions and Physics for Compact Toroids	September
T-15	Tang	Astrophysical magnetic helicity injection: jets, lobes, and LAPD-U	2004 International Sherwood Fusion Theory Conference	April
T-15	Weisheit	High Redshift Formation of Star Clusters by Galaxy Outflows	Workshop on Chemical Enrichment of the Early Universe	August
T-15	Weisheit	Free Radiation in Strongly Coupled Plasmas	APS Division of Plasma Physics Meeting	November
T-15	Weisheit	Free-Free Radiation in Strongly Coupled Plasmas	APS Conference/DPP 04 Meeting	November
T-16	Bonneau	Microscopic Calculations of Fission Barriers and Spin of Fission Fragments	Fall DNP 2004 Meeting	October
T-16	Buervenich	Progress in Extended Lagrangians for Relativistic Point-Coupling Models	APS April Meeting	May

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-16	Buervenich	Relativistic Point-Coupling Models for Finite Nuclei	Workshop on Relativistic Density Functional Theory for Nuclear Structure	September
T-16	Buervenich	Fulleren-Structure in Superheavies, Nuclei Containing Antimatter and Cold Compression	Intl. Symposium on Exotic Nuclei	July
T-16	Buervenich	Nuclear Ground-State Observables from Relativistic Mean-Field Models: Masses, Densities, Radii, Single-Particle Levels	Intl. Conf. on Nuclear Data for Science & Tech ND2004	September
T-16	Carlson	Multiple Facets of Few-Nucleon Physics	Old Dominion University Physics Colloquium	April
T-16	Carlson	Superfluid Fermions from Atomic Gases to Neutron Stars	Oak Ridge National Lab. Seminar	November
T-16	Carlson	Status of the International Neutron Cross Section Standard File	Intl. Conf. on Nuclear Data for Science & Tech. ND2004	September
T-16	Carlson	Microscopic Approaches to Light Nucleus Reactions	Intl. Conf. on Nuclear Data for Science & Tech. ND2004	September
T-16	Carlson	Parity Violation in Few Nucleon Systems	Electron-Nucleus Scattering VIII	June
T-16	Carlson	Dilute Fermi Gases	Seminar Michigan State Universtiy	October
T-16	Carlson	Parity Violation in Few-(Mostly Two) nucleon Systems	Electron-Nucleus Scattering VIII	June
T-16	Chadwick	ASCI nuclear data cross sections for simulations	X-4 seminar, LANL	January
T-16	Chadwick	Nuclear reaction models and data	Dennis Kovar, DOE/SC	March
T-16	Chadwick	ASC needs for experimental data from LANSCE	McClelland's EAV review committee	June
T-16	Chadwick	Comparison of New LANL/T-16 Yttrium Evaluated Cross Sections with NTS Measurements (U)	NEDPEC 2003	January
T-16	Chadwick	Use of Americium Delta-A (240/241 Am) and 242/241 Am as Metrics or Primary Performance in Attribution (U)	NEDPEC 2003	January
T-16	Chadwick	Plutonium Nuclear Cross Section (U)	LANSCE Advisory Committee	March
T-16	Chadwick	2004 Int'l Conference on Nuclear Data for Science & Technology: A Summary	DNP Fall Meeting	October
T-16	Chadwick	Surrogate Reaction	Nuclear Reactions on Unstable Nuclei and Surrogate Reaction Technique	January
T-16	Cowell	Neutrino Interactions in Dense Matter	Gordon Research Conf. Nuclear Chemistry	April
T-16	Friar	The Nuclear Physics of Atomic Hyperfine Structure	Hydrogen Atom III - Intl. Conf on Precision Physics of Simple Atomic Systems	August
T-16	Friar	The Nuclear Physics of Precise Atomic Spectroscopy	Argonne National Lab. Seminar	October
T-16	Gibson	Inelastic Electron Scattering to the First Zero-Plus Excited State of Helium-4	Seminar KVI, University of Groningen	June
T-16	Gibson	Strangeness Physics, from KEK to J-PRAC	3rd Int'l Workshop on Nuclear & Particle Physics at J-PRAC (NP04)	August
T-16	Gibson	Anomalous Magnetic Moment Contributions to Nucleon-Nucleon Bremsstrahlung in the Soft-Photon Approximation	European Few Body XIX Conference	August
T-16	Gibson	Four-Body Calculation of the First 0+ Excited State of ^{4}He	European Few Body XIX Conference	August
T-16	Gibson	Highlights of the KEK Strangeness Program	Int'l. Workshop on Strangeness Nuclear Physics SNP2004	July

Group	Name	Title	Location	Month (2004)
T-16	Gibson	Highlights of the KEK Strangeness Program Since 2000	International Workshop on Strangeness Nuclear Physics	June
T-16	Ginocchio	Pseudospin as a Relativistic Symmetry in Nuclei	Computational and Group Theoretical Methods in Nuclear Physics	March
T-16	Ginocchio	Quantum Mechanics on a Sphere	Beauty of Mathematics in Science; The Intellectual Path of J Q Chen	August
T-16	Ginocchio	Pseudospin Symmetry in Spherical and Deformed Nuclei	Key Topics in Nuclear Structure, 8th International Spring Seminar on Nuclear Physics	May
T-16	Ginocchio	Why is Pseudospin Symmetry Conserved? Testing the nucleon-nucleon interaction for pseudospin symmetry	Blueprints for the Nucleus: From First Principles to Collective Motion	May
T-16	Goldman	Non-Nuclear Multiquark States: Dibaryons and Pentaquarks from a Successful Nuclear Quark Model	Int. Conf. on Mesons and Nucleons, MENU2004, Beijing	August
T-16	Goldman	MultiQuark States	Conf. on Quark Nuclear Physics 2004, U. of Indiana, Bloomington	May
T-16	Goldman	Dibaryons & Penta-quarks:	Mesons and Nucleons 2004	August
T-16	Goldman	Multi-quark States	Conf. on Quark Nuclear Physics	May
T-16	Goldman	Neutrino Clouds of Source of Dark energy	Univ. of Kansas	July
T-16	Goldman	Much Ado About Almost Nothing: Neutrino Masses and Mixings	Department of Energy, Office of Nuclear Physics	September
T-16	Goldman	Much Ado About Almost Nothing: Neutrino Masses and Mixings	University of Kansas	September
T-16	Goldman	Much Ado About Almost Nothing: Neutrino Masses and Mixings	Florida Atlantic University	September
T-16	Goldman	Narrow spin-3 Isospin-0 Diabaryon	Meson-Nucleon Physics and the Structure of the Nucleon	August
T-16	Hale	Applications of R-matrix theory to light-element astrophysical reactions	Institute for Theoretical Physics III of the U. of Erlangen-Nurember	July
T-16	Hale	Level Structure and Scattering in Light Nuclei	Future Theory Developments for Astrophysics and Stockpile Stewardship	October
T-16	Hale	New Results for the 6Li and 10B Neutron Standard Cross Sections from R-Matrix Analyses and Microscopic Calculations for the 7Li and 11B Systems	Int'l. Conf. on Nuclear Data for Science & Tech. ND2004	September
T-16	Hale	Neutron Standard Cross Sections for 1H and 6Li from R-Matrix Analyses and Microscopic Calculations for the N-N and 7Li Systems	Int'l. Conf. on Nuclear Data for Science & Tech. ND2004	September
T-16	Herczeg	CP-Violating Electron-Nucleon Interactions and CP-Violation Beyond the Standard Model	Fourth Tegernsee International Conference on Particle Physics Beyond the Standard Model	April
T-16	Herczeg	Beta Decay Beyond the Standard Model	Int'l Workshop on Fundamental Interactions, European Center for Theoretical Studies in Nuclear Physics and Related Areas (ECT*)	June
T-16	Kawano	Neutron Capture Cross Section	JNDC, Fission Product Nuclear Data Evaluation Working Group Meeting, Tokyo, Japan	June
T-16	Kawano	Combine the ORNL (resonance) and LANL (above resonance) Covariance Data for Gd	Los Alamos Seminar	May
T-16	Kawano	Nuclear Data Evaluations for AFCI	CI Transmutation Working Group Meeting, Albuquerque, NM	April

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-16	Kawano	Neutron capture process for astrophysics	Workshop on new opportunities and challenges with DANCE, Santa Fe, NM	February
T-16	Kawano	Spin Distributions in the Pre-Equilibrium Process	Nuclear Reactions on Unstable Nuclei and the Surrogate Reaction Technique Workshop	January
T-16	Kawano	Evaluation of ^{99}Tc Capture Cross Sections in the Unresolved Resonance Regio	Workshop on Nuclear Data for the Transmutation of Nuclear Waste, GSI-Darmstadt, Germany	September
T-16	Kawano	Subgroup 20: Convariance Matrix Evaluation and Process in the Resolved/Unresolved Resonance Regions	WPEC Meeting	May
T-16	Kawano	Nuclear Data Evaluations for Americium Isotopes	Int'l. Conf. on Nuclear Data for Science & Tech.	October
T-16	Kawano	Methodology of Covariance Evaluation for Th and U Nuclear Data	Evaluated Nuclear Data for the Thorium-Uranium Fuel Cycle Mtg.	December
T-16	Kawano	Subgroup 20: Covariance Matrix Evaluation and Process in the Resolved/Unresolved Resonance Regions Status Report 2004	WPEC Meeting	May
T-16	Lemaire	Correlated Neutron Emission in Fission with Monte-Carlo Methods	The Monte Carlo Method: Versatility Unbounded in a Dynamic Computing World	April
T-16	Lemaire	Monte Carlo Simulations of the Statistical Decay of Fission Fragment in Thermal n+^{235}U Reaction and Spontaneous Fission of ^{252}Cf	Intl. Conf. on Nuclear Data for Science & Technology ND2004	September
T-16	Lemaire	Correlated Neutron Emission in Fission	Intl. Conf. on Nuclear Data for Science & Technology ND2004	September
T-16	Liu	A charge-conjugation-invariance constrained Pomeron-quark vertex	10th International Baryons Conference	October
T-16	Liu	Probing nuclear correlations with quasifree (e,e'p) and (e,e'd) reactions	APS Spring Meeting, Denver, CO	May
T-16	Liu	Quasi-Free Scattering	Seminar for proton radiography groups at Los Alamos	March
T-16	Lynn	The Role of Intermediate Structure and Level Fluctuations in Fission Cross Section Calculations	Nuclear Reactions on Unstable Nuclei and the Surrogate Reaction Technique Workshop	January
T-16	Lynn	Theory in Evaluation of Actinide Fission and Capture Cross Sections	Intl. Conf. on Nuclear Data for Science & Tech. ND2004	September
T-16	MacFarlane	How Accurately Can We Calculate Thermal Systems	LLNL	April
T-16	MacFarlane	Thermal Neutron Scattering Data	Intl. Conf. Nuclear Data for S&T	September
T-16	MacFarlane	Testing New Actinide Cross Sections Proposed for ENDF/B-VII	Intl. Conf. Nuclear Data for S&T	September
T-16	MacFarlane	Analysis and Evaluation of Neutron Reactions on ^{238}U	Intl. Conf. Nuclear Data for S&T	September
T-16	MacFarlane	Systematic Analysis of Uranium Isotopes	Intl. Conf. Nuclear Data for S&T	September
T-16	MacFarlane	Nuclear Data Evaluations for Americium Isotopes	Intl. Conf. Nuclear Data for S&T	September
T-16	MacFarlane	Miscellaneous Data Testing Results from Los Alamos	Cross Section Evaluation Working Group Data Testing Comm. Mtg.	May
T-16	MacFarlane	Recent Fast Data Testing Results from Los Alamos	Cross Section Evaluation Working Group Data Testing Comm. Mtg.	May
T-16	MacFarlane	Recent Thermal Data Testing Results from Los Alamos	Cross Section Evaluation Working Group Data Testing Comm. Mtg.	May
T-16	MacFarlane	Testing New Actinide Cross Sections Proposed for ENDF/B-VI	Intl. Conf. on Nuclear Data for Science & Tech. ND2004	September

Group	Name	Title	Location	Month (2004)
T-16	Madland	Nuclear Ground-State Observables from Relativistic Mean-Field Models: Masses, Densities, Radii, Single-Particle Levels	Intl. Conf. Nuclear Data for S&T	October
T-16	Madland	Systematic Analysis of Uranium Isotopes	Intl. Conf. Nuclear Data for S&T	October
T-16	Madland	Correlated Neutron Emission in Fission	Monte-Carlo 2005 Topical Meeting	April
T-16	Madland	Correlated Neutron Emission in Fission	Fall Meeting APS	October
T-16	Madland	Exploring High-dimensional Fission Potential-Energy Landscapes	APS April Meeting	May
T-16	Madland	Progress in Extended Lagrangians for Relativistic Point-Coupling Models	APS April Meeting	January
T-16	Madland	Self-Consistent Mean-Field Models and their Applications to Superheavy Nuclei	Structure & Dynamics of Elem. Matter, NATO Study Inst.	October
T-16	Möller	Heavy-Element Stability and Decay	Los Alamos Summer School	July
T-16	Möller	Exploring high-dimensional fission potential-energy surfaces: important issues and lessons learned	Intl. Workshop on Theoretical Description of the Nuclear Large Amplitude Collective Motion	March
T-16	Möller	Exploring High-Dimensional Fission Potential-Energy Landscapes	Annual APS Spring Meeting	May
T-16	Möller	Global Studies of Shape Isomerism	DNP Fall Meeting 2004	October
T-16	Möller	Calculation of Fission Barriers for Nuclei with A>190 for Astrophysical Application	DNP Fall Meeting 2004	October
T-16	Möller	The Macroscopic-Microscopic Method 101: Achievements, Capabilities and Limitations	T-16 Seminar	July
T-16	Möller	Global Nuclear Structure Calculations for Astrophysics, Recent Developments	Chemical Enrichment of the Early Universe	August
T-16	Möller	Musings on the Discovery of Element Z+113 and Model Predictions of its Decay Properties	NPP Seminar	September
T-16	Möller	Structure Models Relevant for R-Process	USNDP Brookhaven National Lab.	November
T-16	Möller	Mass Models and Nuclear Structure Applications for Astrophysics	Michigan State University Seminar	November
T-16	Möller	Global Nuclear Structure for Astrophysics, Recent Developments	Chemical Enrichment of the Early Universe	June
T-16	Page	Light nuclei reactions, update	Cross Section Evaluation Working Group and US Nuclear Data Program Meetings	November
T-16	Page	Hybrids, Molecules and Pentaquarks	Workshop on Heavy Quark and Exotics Spectroscopy	May
T-16	Page	R-Matrix Theory and Applications	Seminar LANL	April
T-16	Page	R-Matrix Theory and Nuclear Applications	Seminar LLNL	April
T-16	Page	^{8}Be Nuclear Data Evaluation	Conf. on Nuclear Data for Science & Tech. (ND2004)	September
T-16	Page	Hybrid and Conventional Baryons in the Flux-Tube and Quark Models	10th Intl. Symposium on Meson-Nucleon Physics & the Structure of the Nucleon	August
T-16	Page	A=8 Reactions, Charged Particle Reactions (Mainly)	Cross Section Evaluation Working Group (CSWEG)	November
T-16	Page	P + 13C Rightarrow Source Reaction for Interrogation & Photonuclear Work	Cross Section Evaluation Working Group (CSWEG)	November
T-16	Page	Hybrid and conventional Baryons in the Flux Tube and Quark Models	Meson-Nucleon Physics and the Structure of the Nucleon	August
T-16	Pitcher	Use of a Cold Be Reflector-Filter at the Lujan Center	IAEA Specialist's Meeting	May
T-16	Pitcher	The AFCI Nuclear Data Program	PHYSOR 2004, Chicago, IL	April

Appendix D–Presentations and Invited Talks

Group	Name	Title	Location	Month (2004)
T-16	Pitcher	Nuclear Cross Section Measurements within the Advanced Fuel Cycle Initiative	PHYSOR 2004, Chicago, IL	April
T-16	Pitcher	Lujan Center Cold Source Upgrade Studies	IAEA Technical Meeting	May
T-16	Pitcher	Progress on Transmutation Physics within the Advanced Fuel Cycle Initiative	AFCI Semi-Annual Review	September
T-16	Pitcher	Gadolinium-148 Production Cross Sections Measurements for 600- 800-MeV Protons	Shielding Aspects of Accelerators, Target, ... SATIF-7	May
T-16	Reddy	Neutrino Opacities and Emissivities in Nuclear Matter: the Current State of the Art and Future Challenges	Invited talk at the INT workshop on Open Issues in Understanding Core Collapse Supernovae	June
T-16	Reddy	Neutron Stars, Supernova and Phases of Dense Quark Matter	INT Workshop on QCD and Dense Matter: From Lattices to Stars	March
T-16	Reddy	Neutron Stars, Supernova and Phases of Dense Quark Matter	Invited talk, Quark Matter 2004	January
T-16	Reddy	Equation of State and Neutrino Opacity of Dense Stellar Matter	First Workshop on The R-process	January
T-16	Reddy	Superconducting Quark Matter in Compact Stars	LBNL Workshop on High Density	July
T-16	Reddy	The Micro-Physics of Neutrino Transport at Extreme Density	Compact Stars: Quest for New States of Dense Matter	November
T-16	Reddy	Equation of State and Neutrino Opacity of Dense Stellar Matter	RIA Workshop	January
T-16	Reddy	Matter at Extreme Density and Its Role in Neutron Stars and Supernova	Recent Progress in Many-Body Theories	August
T-16	Reddy	Matter at Extreme Density and Its Role in Supernova and Neutron Stars	Seminar Michigan State	November
T-16	Rupak	Workshop on Theories of Nuclear Forces and Nuclear Systems	Institute for Nuclear Theory, Seattle, WA	September
T-16	Rupak	Gapless superfluidity	12th Int'l Conf. on Recent Progress in Many-Body Theories, Santa Fe	September
T-16	Rupak	PT for lattice QCD at \mcal O(a^2)	Institute for Nuclear Theory, Seattle, WA	September
T-16	Rupak	Topics in dilute fermi and bose systems	Los Alamos Seminar	March
T-16	Rupak	Nuclear Physics from lattice QCD: Finite lattice spacing and volume effects	Seminar University of Washington	September
T-16	Rupak	Pairing in asymmetric fermi system: 2-flavor quark matter	12th Int'l Conf. on Recent Progress in Many-Body Theories, Santa Fe	September
T-16	Talou	Experimental and theoretical evaluation of ^{193}Ir (n,n') ^{193}Ir isomer population cross section	Workshop on Surrogate Reactions Technique, Asilomar, CA	January
T-16	Talou	Nuclear model codes report	WPEC Subgroup A and WPEC Mtg. in Aix-en-Provence, France	May
T-16	Talou	New Evaluation of Am Isotopes for AFCI	AFCI Semi-Annual Review	September
T-16	Talou	The McGNASH Nuclear Reaction Code: Progress Status	Intl. Conf. on Nuclear Data for Science & Tech. (ND2004)	September
T-16	Talou	The Nuclear Reaction Code McGnash	Intl. Conf. on Nuclear Data for Science & Tech. (ND2004)	September
T-16	Talou	Subgroup A: Nuclear Model Codes Report to the Sixteenth Meeting of the WPEC	Sixteenth Meeting of WPEC	May
T-16	Talou	LANL Contribution to the IAEA RIPL-3 Coordinated Research Program	RIPL-3 Coordinated Research Program	June
T-16	Young	Systematic Analysis of Uranium Isotopes	Intl. Conf. on Nuclear Data for Science & Technology ND2004	September
CNLS	Camacho	Photoreceptors Interactions Via a Trophic Pool	Job Presentation	February
CNLS	Camacho	ODE Models in Physiology and Sociology	Summer Colloquium	June

Group	Name	Title	Location	Month (2004)
CNLS	Camacho	Socila Dynamics of Focus Groups	Colloquium	August
CNLS	Huang	A Systematic Study of Genetic Algorithms with Genotype Editing	Genetic & Evolutionary Computation Conference	June
CNLS	Huang	A Coevolutionary Agent Based Model of Genotype Editing	Symposium for Understanding Complex Systems	May
CNLS	Kos	Forster Energy Transfer from a Quantum . . . Transport in Semiconductors	APS March Meeting	March
CNLS	Ramaprabhu	Dependence of the Rayleigh-Taylor Froude Number on the Density Ration	56th Annual Mtg. of the Division of Fluid Dynamics of the APS	November
CNLS	Ramaprabhu	Visualization of Rayleigh-Taylor Instability	9th Int'l Workshop on the Physics of Compressible Turbulent Mixing	July
CNLS	Ramaprabhu	An Overview of Rayleigh-Taylor Experiments at Texas A&M University	9th Int'l Workshop on the Physics of Compressible Turbulent Mixing	July
CNLS	Ramaprabhu	Dependence of Self-similar Rayleigh-Taylor Growth on Initial Conditions	9th Int'l Workshop on the Physics of Compressible Turbulent Mixing	July
CNLS	Ramaprabhu	Progress with Turbulent Mixing by 9th Int'l Workshop on the Physics of Compressible Turbulent Mixing	Stewardship Science Academic Alliances Program Symposium	March